communications

parts & data handbook

MOTOROLA

communications div. parts dept.

MAV-PACK™

Courses available at this printing

BASE STATIONS

*MAV-PACK/TCA1	Micor Base Station, Local Control, C53-73 RTB Series
MAV-PACK/TDA	450 MHz Compa Station, C64/74 MSB Series
*MAV-PACK/TGA	Tone and D.C. Remote Control Consoles, T1367/T1390 Series
MAV-PACK/TXA	Tone Remote Control for Bases, Module Circuits and Servicing, TCN & TLN 1060, 1170, 1230, 1240, & 1250 Series
MAV-PACK/TYA	D.C. Remote Control for Bases, Module Circuits and Servicing, TCN & TLN 1050 and 1170 Series
MAV-PACK/TYB	Repeaters, RT and Community, Module Circuits and Servicing

MOBILES

MAV-PACK/TKA	Micor High Band and Low Band Extenders
MAV-PACK/TLA	Mocom•70 Mobiles, U43BBN, U53BBN, and U51BBN, inc. Extenders
*MAV-PACK/TLB	Low Band Micor Mobile Radio, T51-71 RTN Series
MAV-PACK/TMA	Micor Mobile Radios, T43-T73RTN Series
MAV-PACK/TMA2	Micor Railroad Radios, R43 RTE, RTA, and RTH Series
MAV-PACK/TMB	Mocom•35 Mobile Radios, D33-43CCN Series
MAV-PACK/TMC	High Band Motrac, 40-60-90-100 Watts, L43-73LHT and MHT Radios
MAV-PACK/TMD	Triton VHF FM Marine Radiotelephone, D23 and D33-ABA Series
MAV-PACK/TNA	450 MHz Motran/Motrac U34/44/73 MST Radios
MAV-PACK/XMB	VHF and UHF CD-100 German Radio (Two in one)

HT-PT

MAV-PACK/PQA	HT-220/HT-100 Handie-Talkie Radios, H23FFN and H13FFN Series
MAV-PACK/PQB	450 MHz HT-220 Handie-Talkie Radio

PAGING

MAV-PACK/PPA	High Band Pageboy II A03DNC Series Pagers Accessories, Servicing
MAV-PACK/PPB1	L08ENC and L09DAL High-Capacity Paging System—Part 1
MAV-PACK/PPB2	L08ENC and L09DAL High-Capacity Paging System—Part 2
MAV-PACK/PPC	"PAGECOM" FM Radio Pager, A03EAC Series

ACCESSORY EQUIPMENT

MAV-PACK/AXA	Channel Scan, T-1150 Series, and "Quik-Call II", T-1130 Series
MAV-PACK/AXB1	Micor Systems 90 (Part 1) Channel-Scan, TLN 1387A-88A, and Single Tone Encoder, TLN 1393A-94A Series
MAV-PACK/AXB2	Micor Systems 90 (Part 2) Voice Privacy Adapter, "Quik-Call II" Decoder, and Multiple "P-L" Encoder
MAV-PACK/AXC	D1000 Series Teleprinter Mobile Monitor

PROJECTOR-RECORDER

MAV-300CSM	"Suitcase" Projector/Recorder Console

Available September 1972

communications

parts & data handbook

edition one

MOTOROLA
communications div. parts dept.
1313 E. Algonquin Rd.
Schaumburg, Ill. 60172 U.S.A.

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GENERAL INFORMATION

Many items in this handbook refer to older equipment and are listed for identification and information only. They may not be immediately available. *Always consult your current price list for price and availability.*

For obsolete and unlisted items contact your designated Motorola office. (International customers see below.) Although not immediately available from stock, many of these items can be supplied and priced on a negotiated basis. *Crystals, Channel Elements, and EMR's are not supplied by the Parts Department.* Refer to the index for ordering information for these items.

ALL COUNTRIES EXCEPT U.S.A. AND CANADA

International orders for spare parts and test equipment should be sent to:

Motorola Inc. Communications Division
International Parts Department
1313 E. Algonquin Road
Schaumburg, Illinois 60172 U.S.A.

Refer to the index for the ordering procedure for crystals, channel elements, and reeds. These items are not supplied by the International Parts Department.

Ordering Information

All orders must include the following to avoid delays in processing.

1. Original signed purchase order.
2. Complete "sold to" address.
3. Complete "ship to" address.
4. Shipping terms/instructions.
5. Terms of payment.
6. Proper documents i.e. Letter of Credit, Import Permit.
7. Type of packing desired (Export or Domestic).*
8. Country of ultimate destination.
9. Quotation number (if applicaable).
10. Marking requirements.
11. Quantities and correct units of measure i.e. EA, PK, CD.
12. Motorola part number.
13. Partial or complete shipments allowed.
14. Purchase order number.

*Domestic packing is suitable for air freight shipment.

Obsolete and unlisted items

If price and delivery information is required prior to the placement of an order, contact:

Motorola Inc. Communications Division
Communications Parts Department
1313 E. Algonquin Road
Schaumburg, Illinois 60172 U.S.A.
Attention: Bid and Quote Department

Confirming orders

Orders mailed to confirm telephone, telegraph and teletype orders must be clearly marked "confirming." Motorola is not responsible for duplicate shipments made on such orders not marked "confirming." Telephone, telegraph, and teletype orders are entered as received and understood. If the confirming order differs from the original order the original order takes precedence. All confirming orders must be received within 15 calendar days or the order will be considered cancelled.

Returns

Any discrepancy on orders must be brought to our attention within 30 days of shipment on air shipments or within 90 days of shipment on ocean shipments. Our written authorization is required prior to the return of any material.

CANADA ONLY

Address all Canadian orders to:

Canadian Motorola Electronics Company
Parts Department
3125 Steeles Avenue East • Willowdale, Ontario

Preface
First Edition 1972

There are two primary reasons for the publication of this handbook. The first is a matter of simple economics. For many years the Motorola Communications Division Parts Department has published an annual Buyers' Guide. In recent years this publication has grown to gigantic proportions and promised to grow even larger unless some alternate method was found to provide the required data.

A cursory review of past Buyers' Guides revealed that much of the material consisted of basic, almost timeless data which was republished, essentially unchanged, year after year. The obvious solution to this problem was to eliminate this material from the Buyers' Guide and instead produce a separate publication incorporating only this data.

The second, and equally important, reason is the need itself for a handbook of basic timeless data for the communications technician. This first edition of the Motorola Communications Parts and Data Handbook represents a first attempt in helping to fulfill this need and it is hoped that additional data can be included in future editions.

Even in future editions, however, since the handbook is intended for the communications maintenance and installation technician, data must, of necessity, be limited solely to that required in servicing communications equipment. We must exclude data applicable only to the design or systems engineer.

To maintain the handbook at a reasonable size both from the standpoint of economics and utility we cannot duplicate functions already performed by other publications. We cannot include definitions of electronic terms since this would result in an electronic dictionary of which there are already many available. Similarly with regard to mathematical data we can include only those formulas, tables, etc. which are applicable to the maintenance and installation of communications equipment. Again many general mathematics handbooks are available for those who desire them. Tutorial and training material must also be restricted. It is assumed that most users of this handbook are already qualified technicians and will avail themselves of other available materials for any additional training required. Material included in the handbook must have almost universal application. Data concerning relatively small, specialized fields must also be limited.

For the general data section at the beginning of the handbook we are deeply indebted to the technical staff of the parts department, the Motorola field service, field technical engineering, and technical training departments and other departments and individuals too numerous to mention. We sincerely regret that we were unable to include all of the material submitted because of space limitations and for the reasons cited above.

It is still hoped, however, that these same departments and individuals will continue to submit material for future editions. We also solicit your contributions and suggestions. Please let us know what additional data you would like to see included. This is your opportunity to share any reference material you may have available with other technicians. Perhaps a chart or table posted on your wall or in your tool box or a notebook. We are especially interested in both basic and unusual testing and servicing procedures. Let us know what material you find most useful as well as what you feel could be eliminated in future editions to make room for more useful data.

Future editions will be published at 3-5 year intervals, with interim supplements as required, depending on the amount of new data available.

Please bear in mind that this is only our first edition . . . our first attempt. Hopefully with your help the next edition will contain even more pertinent data and become an even more useful source of information.

Editor—8/72

NOTE: Since much of the data in this handbook refers to older equipment, many items may not be immediately available.

ALWAYS CONSULT YOUR CURRENT PRICE LIST FOR PRICE AND AVAILABILITY.

A Distribution Center

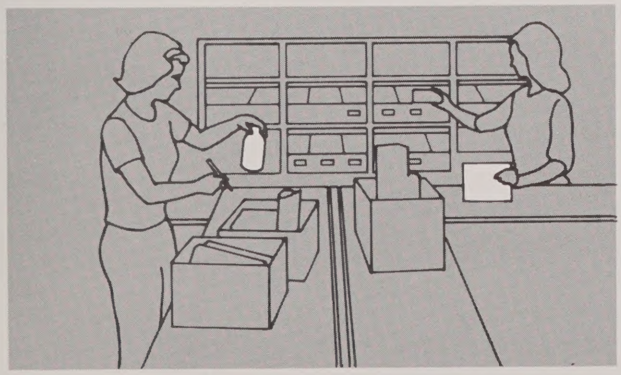
Designed for customer service

COMPUTER CONTROL

All mechanical details of Motorola's international parts distribution center in Schaumburg, Illinois, are computer controlled by one of the most powerful business computers available. Mountains of data regarding customer orders, inventory status and location, and customer addresses and shipping routes are stored on magnetic disc and tape files. Special cathode ray tube display units strategically located throughout the center provide instant access to these files for the ultimate in customer service.

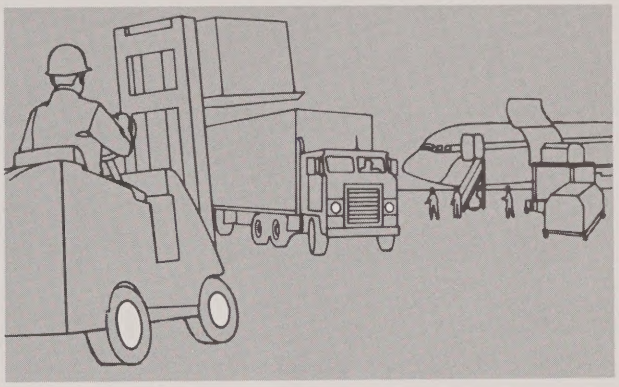
ORDER INPUT

Incoming orders are promptly fed into the computer system which generates stock pick lists and provides shipping information from stored files for fast efficient customer service. *You too can receive the benefits of this ultra-modern distribution center.* Seven parts offices, geared for fast, personalized service, are strategically located throughout the continental United States. This same personalized service is provided to international customers direct from the Motorola communications division parts depot in Schaumburg, Illinois. Orders may be placed via mail, cable, or telex. Canadian customers are served by Canadian Motorola Electronics Company, Willowdale, Ontario.



EXTENSIVE INVENTORIES

Motorola maintains an inventory of over 25,000 different parts for immediate off-the-shelf delivery . . . everything from common electronic components, such as resistors and capacitors, to unique coils, controls, and mounting hardware. Entire printed circuit boards and kits are available for fast efficient servicing. All warehouse stock locations are on file in the computer for prompt filling of customer orders. Extensive inventories and computerized efficiencies assure that your orders are processed with space age speed. Domestic orders received at the Schaumburg facility are normally filled and ready for shipment within 24 hours.

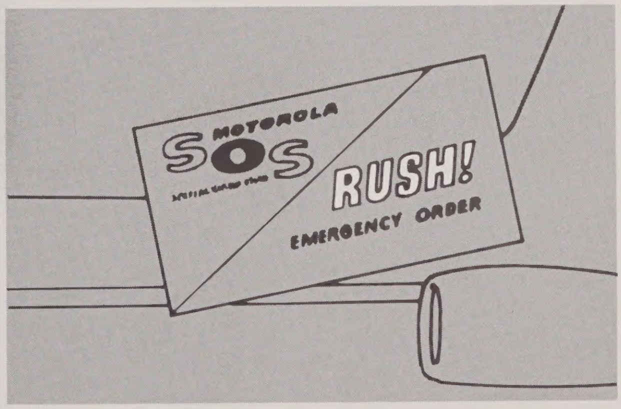


SHIPPING

Once an order is picked, it is checked and packed for shipment. Within the continental United States, shipments are expedited by a unique system of bulk air drops to strategic locations. From here shipments are routed in the most economical manner, consistent with reasonable delivery times, unless otherwise specified.

International orders are shipped direct from Schaumburg, Illinois, via the most economical route. Since it may be necessary to backorder a few items on large orders, your order can be shipped sooner by specifying that partial shipments are allowed.

Motorola's careful attention to all shipments keeps your transportation costs to a minimum consistent with the excellent service you demand.



SOS...SPECIAL ORDER SERVICE

Fast, efficient specialized customer service is always the rule with Motorola. We constantly strive to provide "24-hour" shipment on domestic orders and "10-day" shipment on international orders where extensive export documentation is required. But, we can even top this in an emergency with SOS . . . *Special Order Service.*

Special Order Service begins with you . . . ask for it when you need it. When an emergency strikes . . . a base station or key mobile is "off-the-air" . . . you need help immediately. During working hours, you can get immediate action by telephoning your designated Motorola office and for after-hours or for international orders, phone or cable Motorola parts headquarters in Schaumburg, Illinois. Specify the nature of your emergency and the parts required. Motorola will take over from there to provide lightning fast action.

THE POWER of NEGATIVE THINKING

Quality is a sometimes thing. Unless you work at it . . . and very hard . . . it may not be there the next time you look.

That's why Motorola insists that all replacement parts conform to the same high quality standards as those used in the manufacture of original equipment.

SELECTED COMPONENTS

Here's an example of how we work. Specifications are first determined on the engineer's drawing board. Suppliers are then carefully selected and pilot and production samples are "put through the paces" with a series of inspections and tests. Parts are subjected to tremendous extremes of temperature, humidity, vibration, voltage and life tests that far exceed the actual conditions encountered in normal two-way radio operations. This tells us which manufacturer is the best for each component we use.

NEGATIVE THINKING

But knowing the best manufacturers is only the first step in our "search for excellence." You have to take the positive approach to the problem and *think negatively.* Always assume that quality can vanish in thin air. Even though your source for a certain component has never let you down, you still have to assume that somewhere, somehow, somebody is going to slip up. We may receive some components that don't meet our standards. So, that's why once approved, we continue to subject all components to stringent checks from incoming inspection . . . through production quality control . . . and final testing of each component and assembly. We check and check and recheck. And our suppliers know this. And it worries them a little for none of their other customers are nitpickers like we are. So they check and check too, to make sure that all the components that go to Motorola are especially good. (We sometimes wonder who buys all those components that aren't good enough for us.)

IT TAKES A CHAMPION TO BEAR THE MOTOROLA NAME

What's the result of all this *negative thinking?* Well, even though radio components may be identical in appearance, carry the same specifications, and may even be supplied by the same manufacturer, only the very best get the Motorola name.

Transistors, for example, are circuit-selected. Of the thousands available, we select only the ones that will do the best jobs for a particular circuit. Meticulous inspection, preaging for more than a week at temperatures close to boiling and then more tests provides maximum assurance of consistent reliability and quality.

Tubes, like transistors, may be similar in appearance. Motorola tubes, however, are carefully selected for adaptability to the specialized service of two-way radio. Even an unsophisticated component like the simple electrolytic capacitor gets the Motorola treatment.

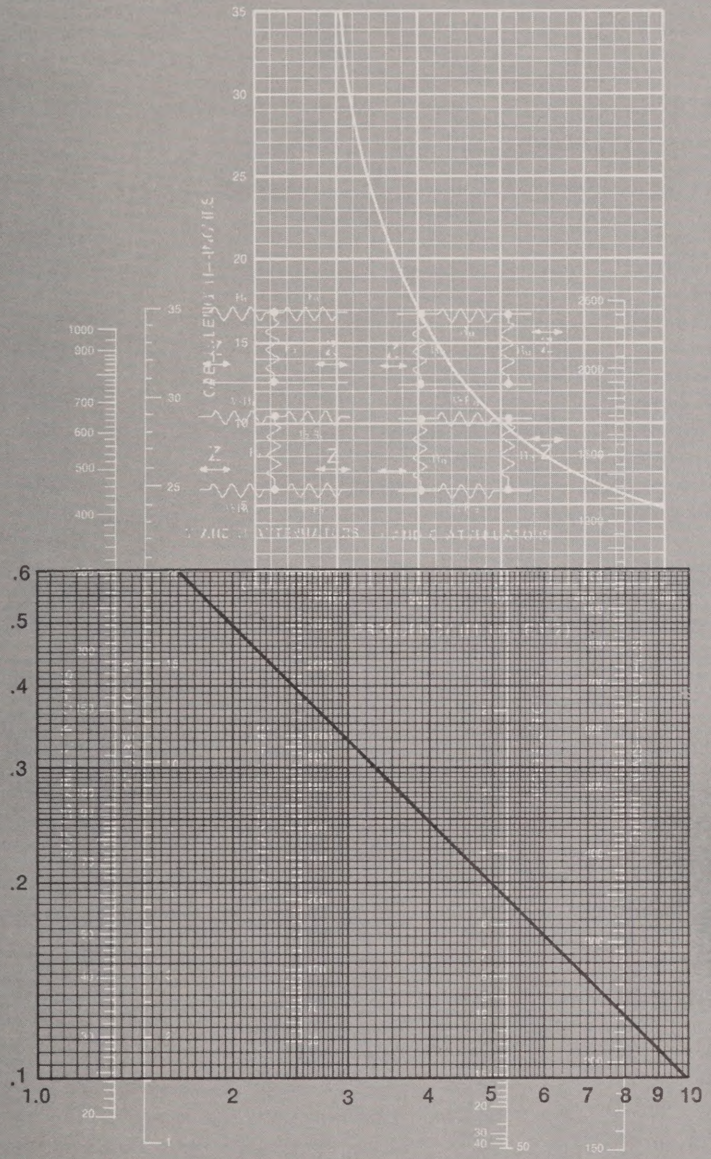
Consider that most tubular electrolytics are made for operation at a maximum of plus 149°F and few have the desired operational characteristics below freezing. At low temperatures, they are only guaranteed not to short or cause a failure. They may not function effectively as a capacitor. Motorola capacitors are designed for continuous duty operation over the range of minus 22°F to plus 185°F . . . with occasional excursions to plus 221°F.

ESTABLISHED QUALITY

We can't afford to sell you a bad component. The performance of our radios is too important to our reputation as a leader in two-way radio communications. "Run of the mill" parts may cost less and may even provide reasonable performance. But, when you consider the increased chances of premature failure and the increased cost of maintenance, inferior performance, and outages, it's easy to see that Motorola quality costs you less.

WHEN COMMUNICATIONS ARE VITAL DEPEND ON GENUINE MOTOROLA REPLACEMENT PARTS

General Data



- Conversion formulas
- Tables and charts
- Common electronic formulas
- Nomographs
- Schematic symbols
- Logic symbols
- Frequency data
- Antennas and transmission lines
- Test equipment data

A collection of general data useful to the electronic servicing technician.

GENERAL CONVERSION FORMULAS

Linear Measure

Miles (nautical) × 1.1508 = miles (statute)
mils × 10^{-3} = inches
feet × 12 = inches
yards × 3 = feet
miles × 5,280 = feet

Liquid Measure

quarts × 32 = ounces (fluid)
quarts × 2 = pints
gallons × 4 = quarts
gallons (liq. U.S.) × 0.8327 = gallons (liq. Br. Imperial, Canada)

Avoirdupois Weight

pounds × 16 = ounces
short tons × 2,000 = pounds
long tons (Eng.) × 2,240 = pounds

Temperature

centigrade (celsius) to fahrenheit
$°F = (°C \times 9/5) + 32$
fahrenheit to centigrade (celsius)
$°C = (°F - 32)\ 5/9$
Kelvin (centrigrade absolute) = °C + 273.18
Rankine (fahrenheit absolute) = °F + 459.72

Angular Measurement

degrees × 0.01745 = radians
radians × 2π = revolutions

Sinusoidal Waveform Measurements

average × 1.11 = rms
average × 1.57 = peak

rms × 0.9 = average
rms × 1.414 = peak

peak × 0.637 = average
peak × 0.707 = rms

METRIC CONVERSION FORMULAS

Linear Measure

centimeters × 0.3937 = inches
meters × 39.37 = inches
meters × 1.0936 = yards
kilometers × 3281 = feet
kilometers × 0.62137 = miles (statute)

inches × 2.540 = centimeters
yards × 0.9144 = meters
miles (statute) × 1.6093 = kilometers

microns × 10^{-6} = meters
millimicrons × 10^{-9} = meters
Angstrom Units × 10^{-10} = meters

Liquid Measure

liters × 0.2642 = gallons (liq. U.S.)
milliliters × 0.0338 = fluid ounces

Weight

grams × 0.03527 = ounces
kilograms × 2.2046 = pounds
metric tons × 1.1023 = long tons (Eng)

ounces × 28.35 = grams
pounds × 0.4536 = kilograms
long tons (Eng.) × 0.9072 = metric tons

COMMON MATHEMATICAL CONSTANTS

$\pi = 3.14159$
Base of natural logs, $\epsilon = 2.718$
Velocity of light in vacuum, c = 186,280 mi/sec = 2.998×10^{10} cm/sec

METRIC PREFIXES

Prefix	Symbol	Value	Example
tera	T	10^{12}	terahertz
giga	G	10^{9}	gigahertz
mega	M	10^{6}	megahertz
kilo	K	10^{3}	kilohertz
centi	C	10^{-2}	centimeter
milli	m	10^{-3}	millihenry
micro	μ	10^{-6}	microfarad
nano	n	10^{-9}	nanosecond
pico	p	10^{-12}	picofarad

POWERS OF 10

10^{12} = 1,000,000,000,000— 1 trillion (U.S. and French)
1 billion (British and German)
10^{9} = 1,000,000,000— 1 billion (U.S.), 1 milliard (French)
1 milliarde (German)
10^{6} = 1,000,000— 1 million
10^{3} = 1,000— 1 thousand
10^{2} = 100— 1 hundred
10^{1} = 10— ten
10^{0} = 1— one
10^{-1} = 0.1— 1 tenth
10^{-2} = 0.01— 1 hundredth
10^{-3} = 0.001— 1 thousandth
10^{-6} = 0.000001— 1 millionth
10^{-9} = 0.000000001— 1 billionth (U.S.)
10^{-12} = 0.000000000001— 1 trillionth (U.S.)

GREEK ALPHABET

Greek	English Equivalent	Name	Commonly used to designate
Α α	a	Alpha	Angles. Area. Coefficients. Attenuation constant. Absorption factor. Current gain of common base configuration.
Β βϐ	b	Beta	Angles. Flux density. Phase constant. Current gain of common emitter.
Γ γ	g	Gamma	Angles. Conductivity. Specific gravity.
Δ δ	d	Delta	Increment or decrement (cap or lc). Variation. Density. Angles.
Ε ϵ	e	Epsilon	Base of natural logarithms. Electric intensity.
Ζ ζ	z	Zeta	Impedance. Coefficients. Coordinates.
Η η	é	Eta	Hysteresis coefficient. Efficiency. Surface charge density.
ΘΘ θϑ	th	Theta	Temperature. Phase angle. Time Constant. Reluctance. Angles.
Ι ι	i	Iota	Unit vector.
Κ κ	k	Kappa	Dielectric constant. Susceptibility.
Λ λ	l	Lambda	Wavelength. Attenuation constant.
Μ μ	m	Mu	Micro-. Amplification factor. Permeability.
Ν ν	n	Nu	Reluctivity. Frequency.
Ξ ξ	x	Xi	Coordinates.
Ο ο	o	Omicron	————
Π π	p	Pi	3.1416 (Ratio of circumference to diameter)
Ρ ρ	r	Rho	Resistivity. Coordinates.
Σ σ ς	s	Sigma	Summation (cap). Electrical conductivity. Leakage coefficient. Surface charge density. Complex propagation constant.
Τ τ	t	Tau	Time constant. Time phase displacement. Density. Transmission factor.
Υ υ	u	Upsilon	————
Φ ϕφ	ph	Phi	Magnetic flux. Angles. Scalar potential (cap)
Χ χ	ch	Chi	Electric susceptibility. Angles.
Ψ ψ	ps	Psi	Dielectric flux. Phase difference. Coordinates. Angles.
Ω ω	ō	Omega	Angular velocity. Resistance in ohms (cap). Solid angles (cap).

Lower case letters are used except where capital (cap) is indicated.

COMMON ELECTRONIC FORMULAS

Ohm's Law

$E = IR$, $R = E/I$, $I = E/R$
$P = EI$, $P = I^2R$, $P = E^2/R$

Resistors in series

$R_t = R_1 + R_2$

Resistors in parallel

$$R_t = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

Reactance

$X_L = 2\pi FL$
$X_C = 1/2\pi FC$

Impedance

$Z = \sqrt{R_t^2 + X_t^2}$

Time constant

$T = RC$, $T = L/R$

Resonant frequency of L-C circuit

$f = \frac{1}{2}\pi\sqrt{LC}$

VSWR

$VSWR = R_L/Z_o$, $VSWR = E\ min/E\ max$

Frequency and wavelength

$f = 300 \times 10^6/\lambda$ (in meters), $f = 984 \times 10^6/\lambda$ (in feet)

Decibels

$db = 10 \log (P_1/P_2)$, $db = 20 \log (E_1\sqrt{Z_2}/E_2\sqrt{Z_1})$, $db = 20 \log (I_1\sqrt{Z_1}/I_2\sqrt{Z_2})$

Where:

C = Capacitance
db = Decibels
E = Voltage
f = Frequency
I = Current
L = Inductance
P = Power
R = Resistance
R_t = total resistance
R_L = load resistance
T = Time constants
VSWR = Voltage standing wave ratio
X = Reactance
Z = Impedance
Z_o = Characteristic impedance of line
λ = Wavelength

TEMPERATURE CONVERSION CHART

Centigrade °C	Fahrenheit °F	Centigrade °C	Fahrenheit °F	Centigrade °C	Fahrenheit °F
−60	−76.0	−17.8	0.0	30	86.0
−55	−67.0	−15	5.0	35	95.0
−50	−58.0	−10	14.0	40	104.0
−45	−49.0	−5	23.0	45	113.0
−40	−40.0	0	32.0	50	122.0
−35	−31.0	5	41.0	55	131.0
−30	−22.0	10	50.0	60	140.0
−25	−13.0	15	59.0	65	149.0
−20	−4.0	20	68.0	70	158.0

Submitted by Rich Kovarik

DECIMAL EQUIVALENT CHART

Inches			Decimal Equivalent	Millimeter Equivalent
1/64			.0156	0.397
	1/32		.0313	.0794
3/64			.0469	1.191
		1/16	.0625	1.588
5/64			.0781	1.985
	3/32		.0938	2.381
7/64			.1094	2.778
		1/8	.1250	3.175
9/64			.1406	3.572
	5/32		.1563	3.969
11/64			.1719	4.366
		3/16	.1875	4.762
13/64			.2031	5.159
	7/32		.2188	5.556
15/64			.2344	5.953
		1/4	.2500	6.350
17/64			.2656	6.747
	9/32		.2813	7.144
19/64			.2969	7.541
		5/16	.3125	7.937
21/64			.3281	8.334
	11/32		.3438	8.731
23/64			.3594	9.128
		3/8	.3750	9.525
25/64			.3906	9.922
	13/32		.4063	10.319
27/64			.4219	10.716
		7/16	.4375	11.112
29/64			.4531	11.509
	15/32		.4688	11.906
31/64			.4844	12.303
		1/2	.5000	12.700
33/64			.5156	13.097
	17/32		.5313	13.494
35/64			.5469	13.891
		9/16	.5625	14.287
37/64			.5781	14.684
	19/32		.5938	15.081
39/64			.6094	15.478
		5/8	.6250	15.875
41/64			.6406	16.272
	21/32		.6563	16.669
43/64			.6719	17.067
		11/16	.6875	17.463
45/64			.7031	17.860
	23/32		.7188	18.238
47/64			.7344	18.635
		3/4	.7500	19.049
49/64			.7656	19.446
	25/32		.7813	19.842
51/64			.7969	20.239
		13/16	.8125	20.636
53/64			.8281	21.033
	27/32		.8438	21.430
55/64			.8594	21.827
		7/8	.8750	22.224
57/64			.8906	22.621
	29/32		.9063	23.018
59/64			.9219	23.415
		15/16	.9375	23.812
61/64			.9531	24.209
	31/32		.9688	24.606
63/64			.9844	25.004
		1.0	1.0000	25.400

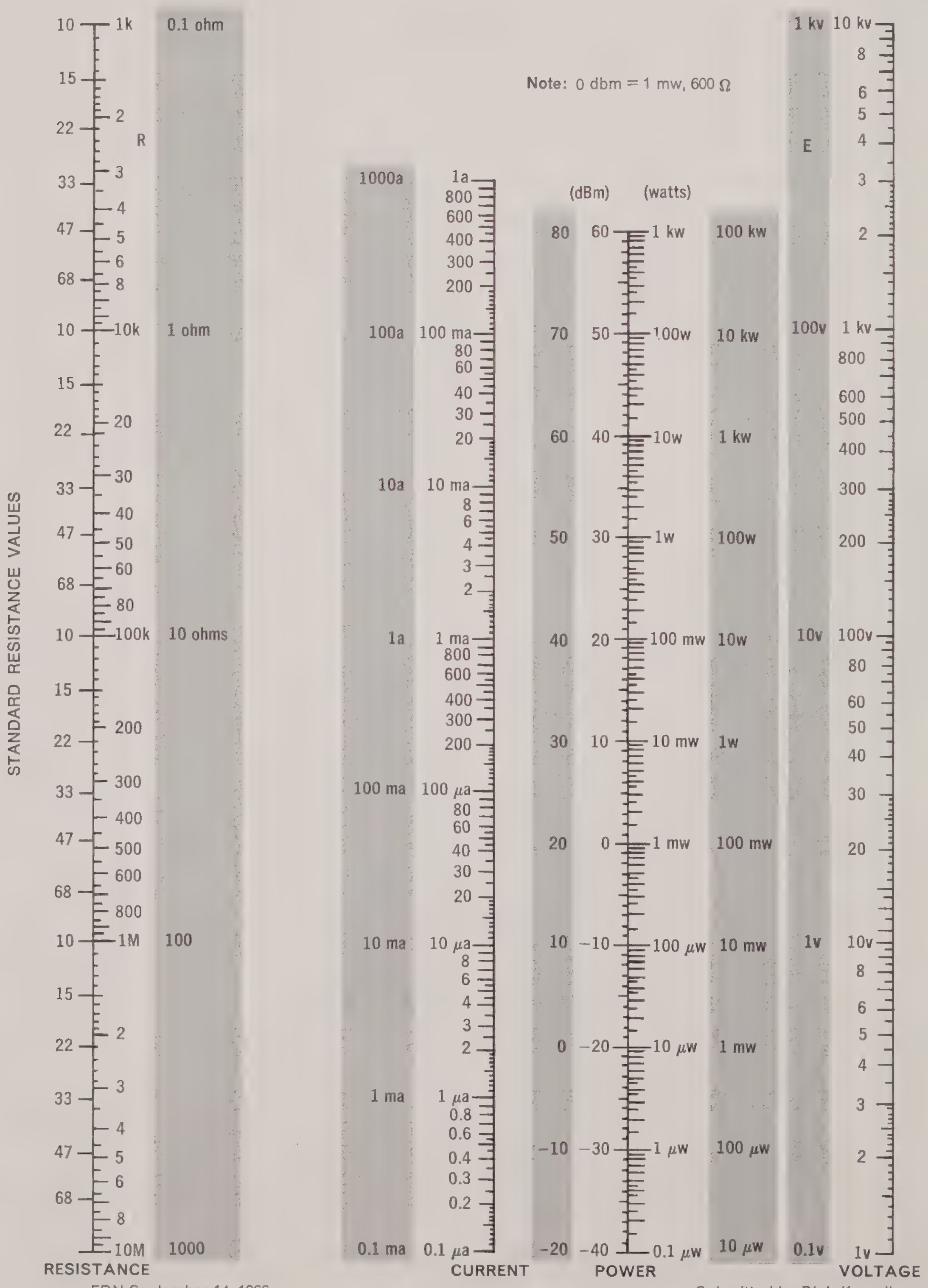
COMMON LOGARITHMS

N	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
1	.000	.041	.079	.114	.146	.176	.204	.230	.255	.279
2	.301	.322	.342	.362	.380	.398	.415	.431	.447	.462
3	.477	.491	.505	.519	.532	.544	.556	.568	.580	.591
4	.602	.613	.623	.633	.644	.653	.663	.672	.681	.690
5	.699	.708	.716	.724	.732	.740	.748	.756	.763	.771
6	.778	.785	.792	.799	.806	.813	.820	.826	.833	.839
7	.845	.851	.857	.863	.869	.875	.881	.887	.892	.898
8	.903	.909	.914	.919	.924	.929	.935	.940	.945	.949
9	.954	.959	.964	.969	.973	.978	.982	.987	.991	.996

Submitted by Ed Bachner

Resistance, Power, Voltage and Current

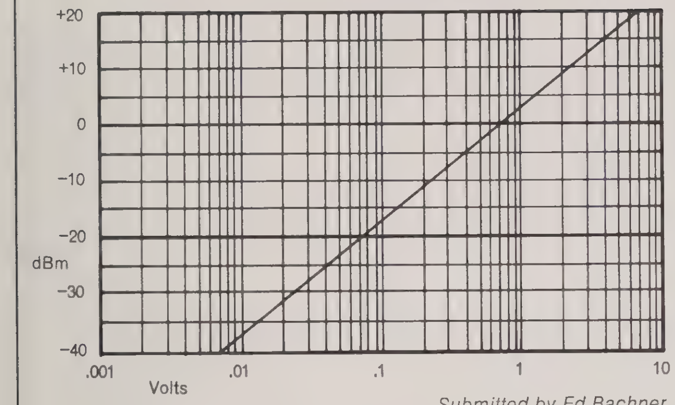
Lay straightedge across two known parameters and read two unknowns from appropriate scales. Note that two sets of scales are used. All numbers for any given problem should be read from the same set of scales, either black or grey.



EDN September 14, 1966

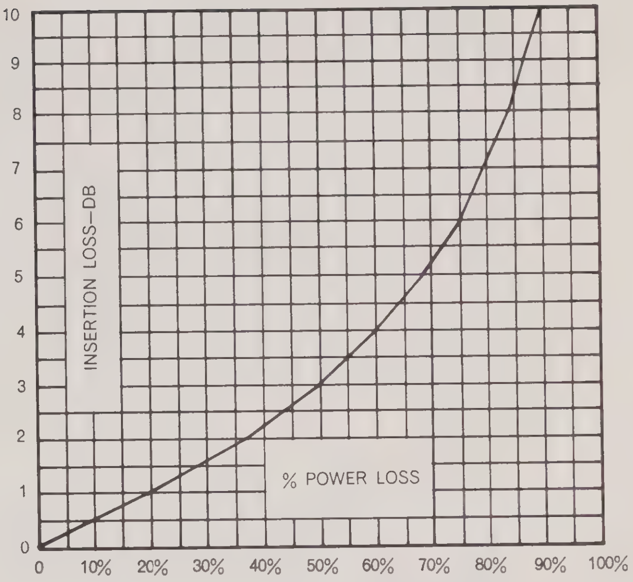
Submitted by Rich Kovarik

dBm vs volts across 600 Ω



Submitted by Ed Bachner

−db vs. % power loss



Submitted by Ed Bachner

DECIBEL TABLE

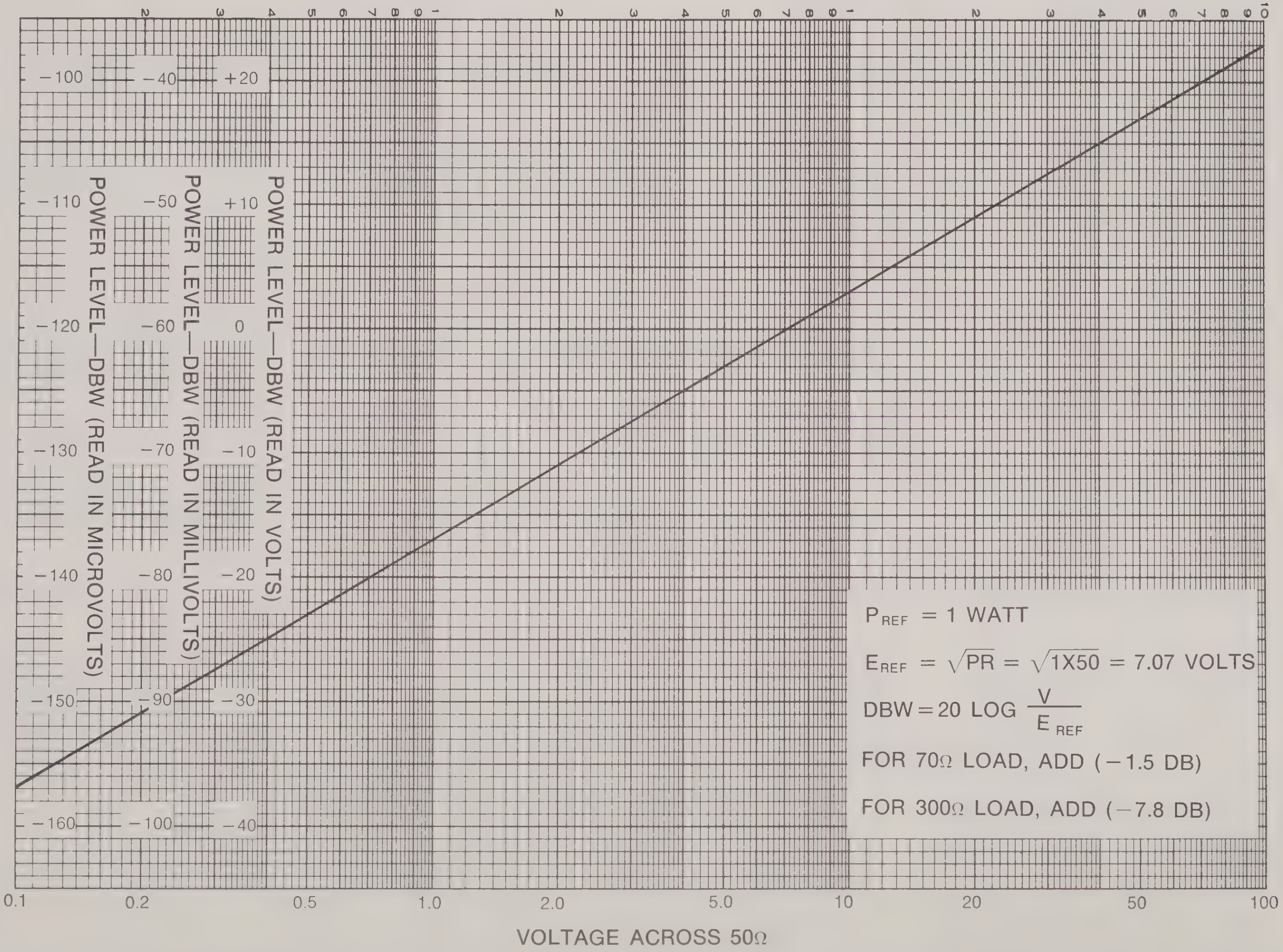
Note$_1$ Adding db is equivalent to multiplying ratios. $db_1 + db_2 \rightarrow (ratio)_1 \times (ratio)_2$

Voltage Ratio*	Power Ratio	← − db + →	Voltage Ratio*	Power Ratio	Voltage Ratio*	Power Ratio	← − db + →	Voltage Ratio*	Power Ratio
1.000	1.000	0	1.000	1.000	0.376	0.141	8.5	2.661	7.079
0.989	0.977	0.1	1.012	1.023	0.355	0.126	9.0	2.818	7.943
0.977	0.955	0.2	1.023	1.047	0.335	0.112	9.5	2.985	8.913
0.966	0.933	0.3	1.035	1.072	0.316	0.100	10	3.162	10.00
0.955	0.912	0.4	1.047	1.096	0.282	0.0794	11	3.55	12.6
0.944	0.891	0.5	1.059	1.122	0.251	0.0631	12	3.98	15.9
0.933	0.871	0.6	1.072	1.148	0.224	0.0501	13	4.47	20.0
0.923	0.851	0.7	1.084	1.175	0.200	0.0398	14	5.01	25.1
0.912	0.832	0.8	1.096	1.202	0.178	0.0316	15	5.62	31.6
0.902	0.813	0.9	1.109	1.230	0.159	0.0251	16	6.31	39.8
0.891	0.794	1.0	1.122	1.259	0.141	0.0200	17	7.08	50.1
0.841	0.708	1.5	1.189	1.413	0.126	0.0159	18	7.94	63.1
0.794	0.631	2.0	1.259	1.585	0.122	0.0126	19	8.91	79.4
0.750	0.562	2.5	1.334	1.778	0.100	0.0100	20	10.00	100.
0.708	0.501	3.0	1.413	1.995	$3.16x10^{-2}$	10^{-3}	30	$3.16x10$	10^{3}
0.668	0.447	3.5	1.496	2.239	10^{-2}	10^{-4}	40	10^{2}	10^{4}
0.631	0.398	4.0	1.585	2.512	$3.16x10^{-3}$	10^{-5}	50	$3.16x10^{2}$	10^{5}
0.596	0.355	4.5	1.679	2.818	10^{-3}	10^{-6}	60	10^{3}	10^{6}
0.562	0.316	5.0	1.778	3.162	$3.16x10^{-4}$	10^{-7}	70	$3.16x10^{3}$	10^{7}
0.531	0.282	5.5	1.884	3.548	10^{-4}	10^{-8}	80	10^{4}	10^{8}
0.501	0.251	6.0	1.995	3.981	$3.16x10^{-5}$	10^{-9}	90	$3.16x10^{4}$	19^{9}
0.473	0.224	6.5	2.113	4.467	10^{-5}	10^{-10}	100	10^{5}	10^{10}
0.447	0.200	7.0	2.239	5.012	$3.16x10^{-6}$	10^{-11}	110	$3.16x10^{5}$	10^{11}
0.422	0.178	7.5	2.371	5.623	10^{-6}	10^{-12}	120	10^{6}	10^{12}
0.398	0.159	8.0	2.512	6.310					

*Across equal impedances.

Submitted by Jim Hoffswell.

DBW Power Level vs Voltage Across 50 Ω



$P_{REF} = 1$ WATT

$E_{REF} = \sqrt{PR} = \sqrt{1X50} = 7.07$ VOLTS

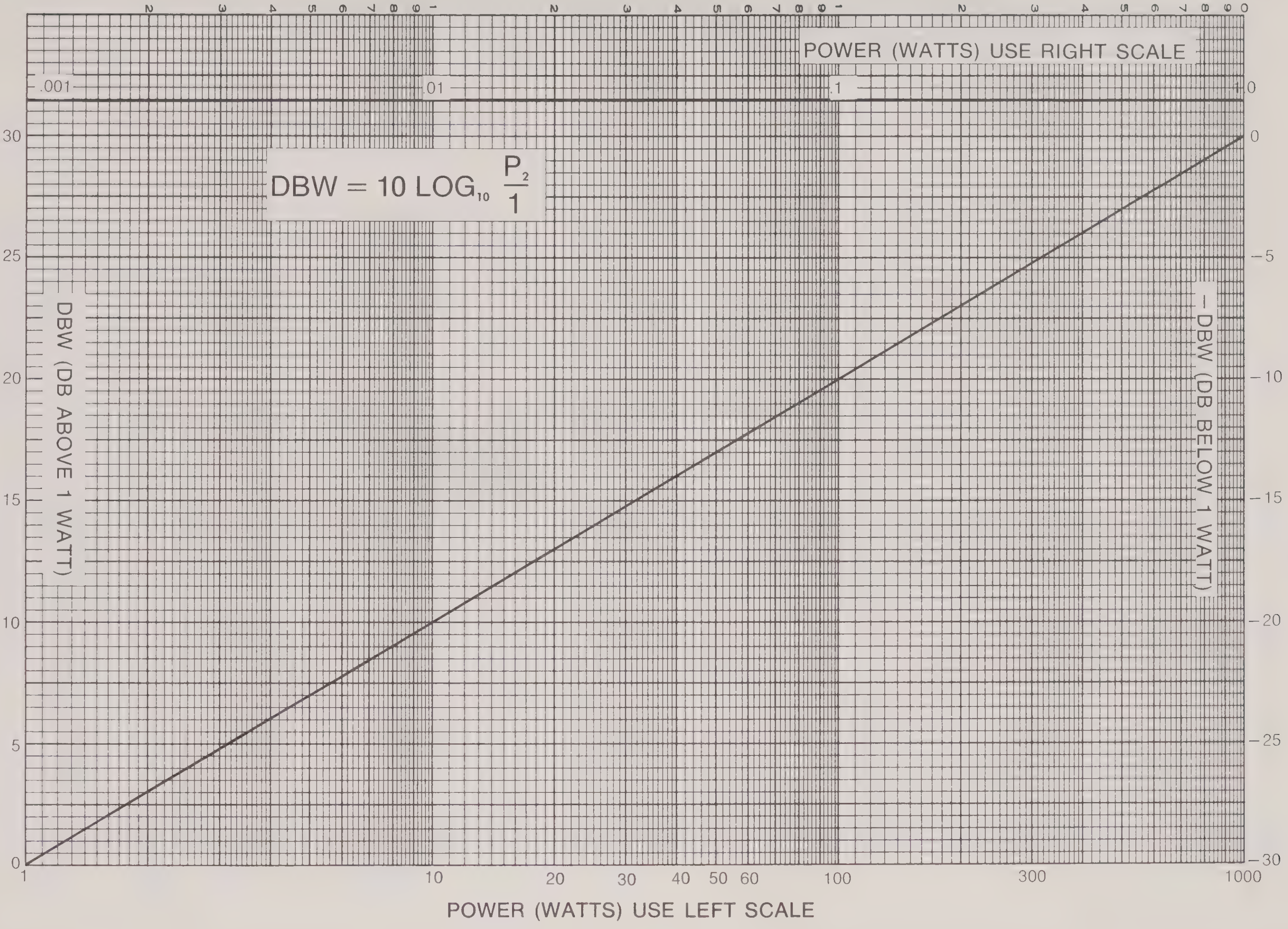
$DBW = 20 \text{ LOG } \frac{V}{E_{REF}}$

FOR 70Ω LOAD, ADD (−1.5 DB)

FOR 300Ω LOAD, ADD (−7.8 DB)

Submitted by Jim Hoffswell and Dan Newby

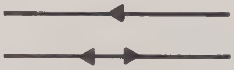
DB With Reference To 1 Watt

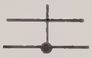


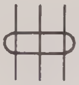
$$DBW = 10\ LOG_{10}\ \frac{P_2}{1}$$

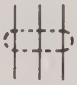
Submitted by Jim Hoffswell and Dan Newby

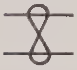
COMMON SCHEMATIC SYMBOLS

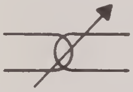

Direction of Flow of Power, Signal or Information.

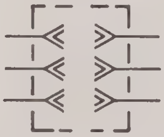

Tie Point

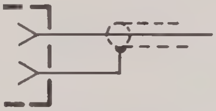

Leads Cabled

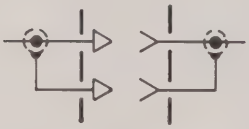

Leads Shielded

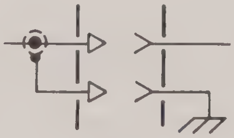

Twisted Pair


Coupling Loop

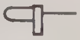

Card Type Connector

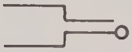

Receptacle with Shielded Lead

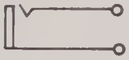

Coaxial with the Outside Conductor Shown Carried Through

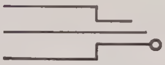

Coaxial with Outside Conductor Shown Carried Through and Terminated on Chassis

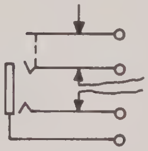
Jack Receptacle

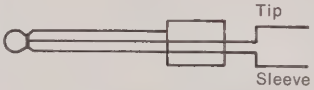

Jack


2-Conductor (Plug)

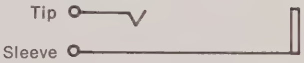

2-Conductor (Jack)


3-Conductor (Plug)

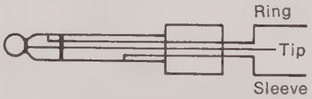

3-Conductor (Jack) with 2 Break Contacts (Normals) and 1 Auxiliary Make Contact



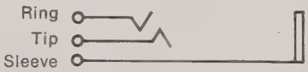
2 Conductor Phone Plug



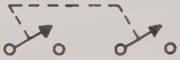
2 Conductor Jack

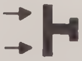


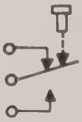
3 Conductor Phone Plug

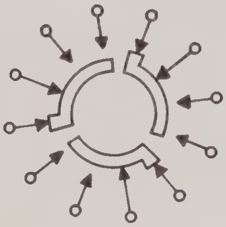


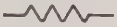
3 Conductor Jack

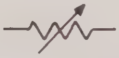

Switches Ganged

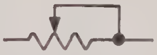

P-T-T Switch

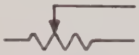

Push-Button Switch

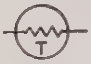

Rotary Switch


Resistor

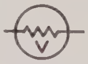

Resistor Variable


Potentiometer

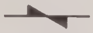

Rheostat

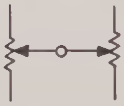


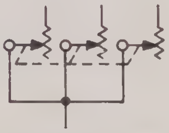
Thermistor

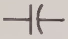


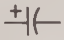
Varistor

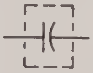

Voltage Dependent Resistor

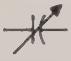

"L" Pad

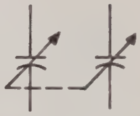

Variable "T" Pad

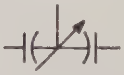

Capacitor

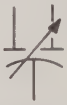

Polarized Capacitor

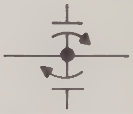

Shielded Capacitor

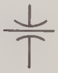

Adjustable or Variable Capacitor

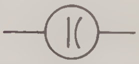

Adjustable or Variable Capacitors Mechanical Linkage of Units

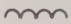

Split-stator Capacitor

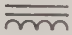

Continuously Adjustable or Variable Differential Capacitor

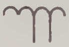

Butterfly capacitor

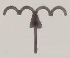

Feed Thru Capacitor

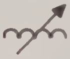

Neutralizer Capacitor

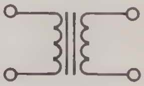

Inductor

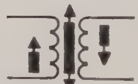

Magnetic Core Inductors

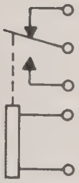

Tapped

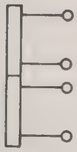

Adjustable Inductor


Adjustable or Continuously Adjustable Inductor


Transformer


Slug Tuned Coil


Relay


Double Coil

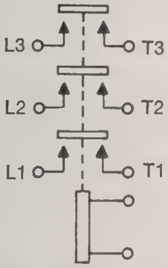
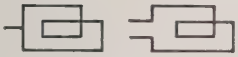


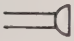
Plate Contactor Relay

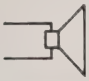
ANTENNA

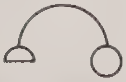
general

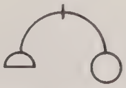
dipole

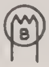

Loop


Microphone

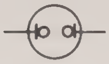

Loudspeaker

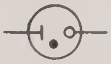

Handset F Operator's Set

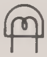

Handset F Operator's Set
With Push-To-Talk Switch

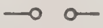


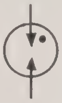
Lamp
Thermal Ballast

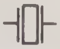

Lamp
Neon AC

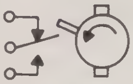

Lamp
Neon DC

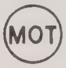

Lamp
Incandescent


Arrestor
(Spark Gap)

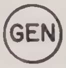

Spark Gap


Crystal

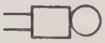

Timer

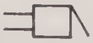


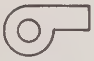
Motor

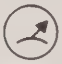


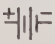
Generator

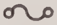

Bell

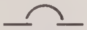

Buzzer

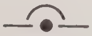

Blower

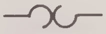

Meter

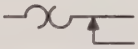

Battery

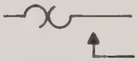

Fuse


Circuit Breaker

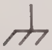

Network
Protector

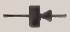

Thermostat

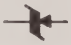

With Make Contact

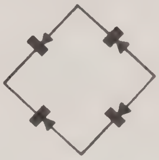

With Break Contact

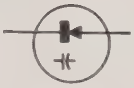
Ground

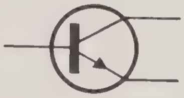

Chassis or Frame
Connection

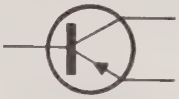

Diode

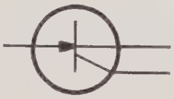

Zener Diode

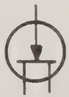

Bridge
Rectifier

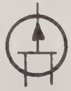

Varactor


Transistor NPN

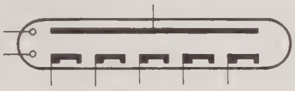

Transistor PNP

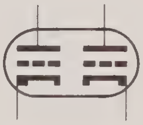

Silicon Controlled Rectifier

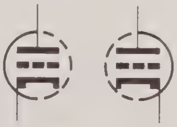

field-effect transistor, N-type base

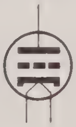

field-effect transistor, P-type base

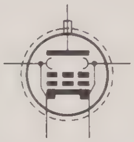
TUBE SYMBOLS

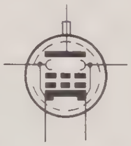

Counter Tube

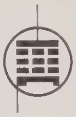

Dual Triode
(Elongated Envelope)

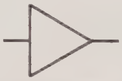

Dual Triode
(Split Envelope)

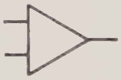

Triode

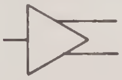

Beam Power Tetrode
(Externally Shielded)

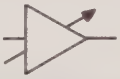

Beam Power Tetrode
(Internally Shielded)

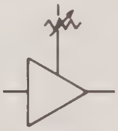

Pentode

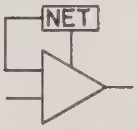

Amplifier


Amplifier Two Inputs

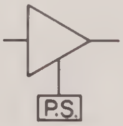

Amplifier Two Outputs


Amplifier Adjustable Gain


Amplifier
Associated Attenuator



Amplifier External
Feedback Path



Amplifier Associated
Power Supply

COMMON LOGIC SYMBOLS

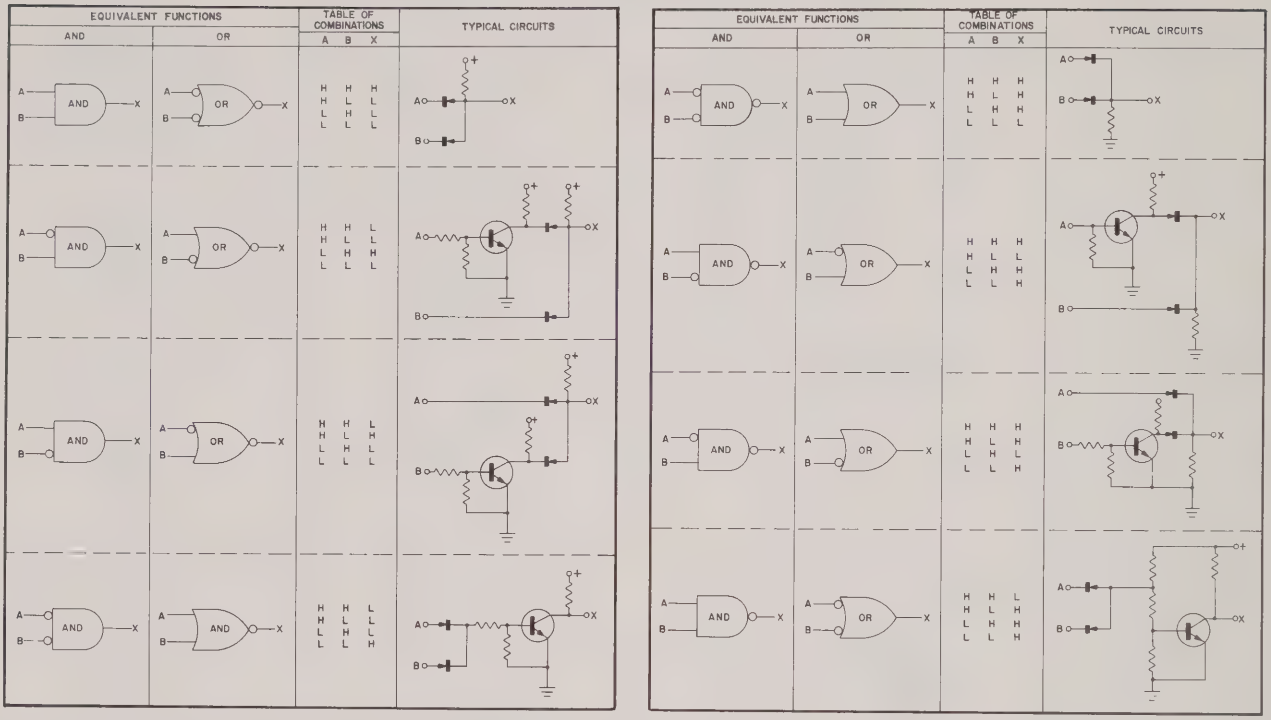
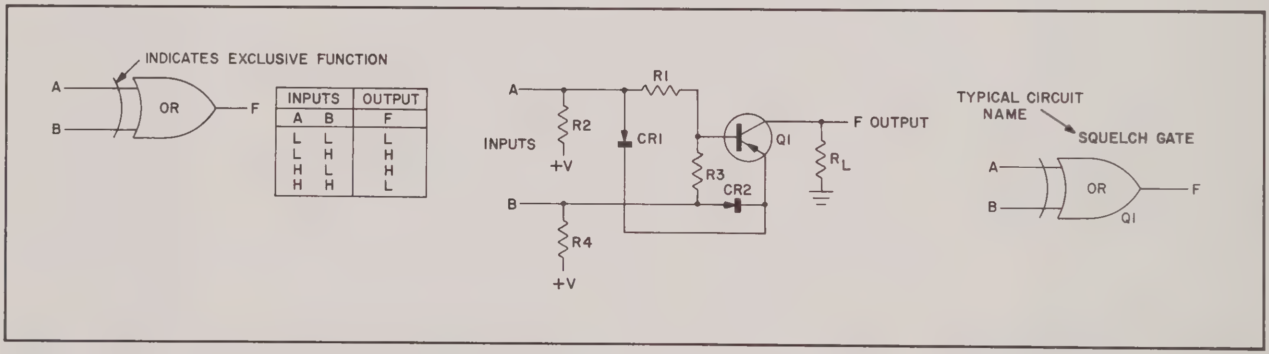
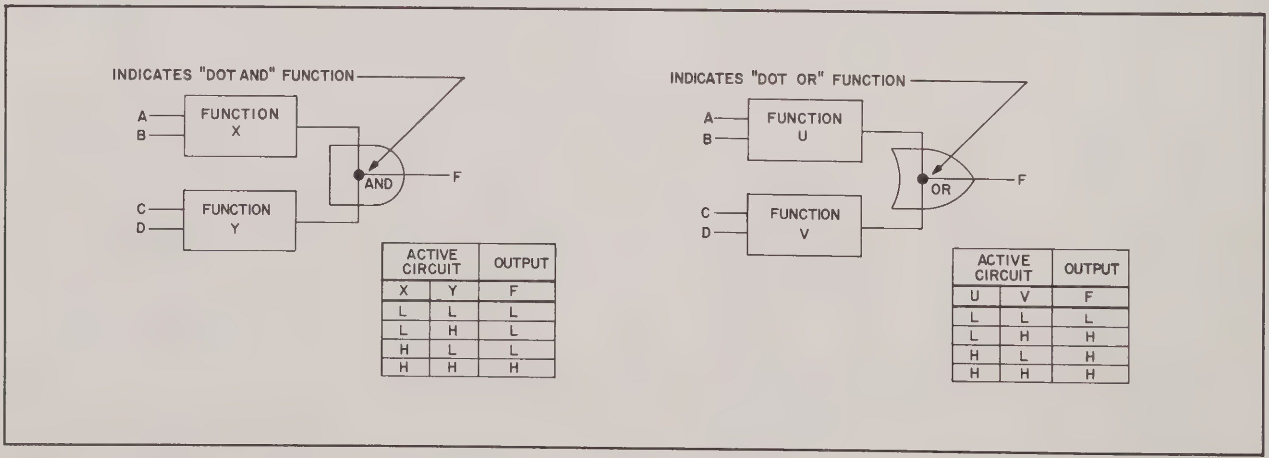


Chart of Typical AND and OR Logic Presentations Equivalent Circuit Diagrams



INPUTS		OUTPUT
A	B	F
L	L	L
L	H	H
H	L	H
H	H	L

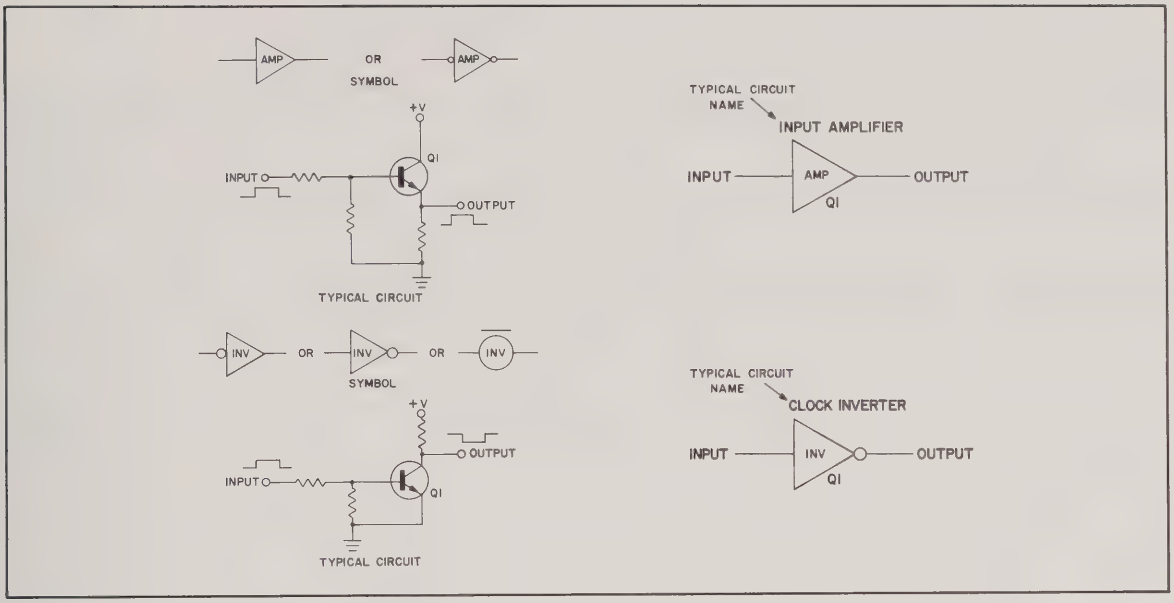
Typical Exclusive OR Gate Schematic Diagram and Logic Drawing



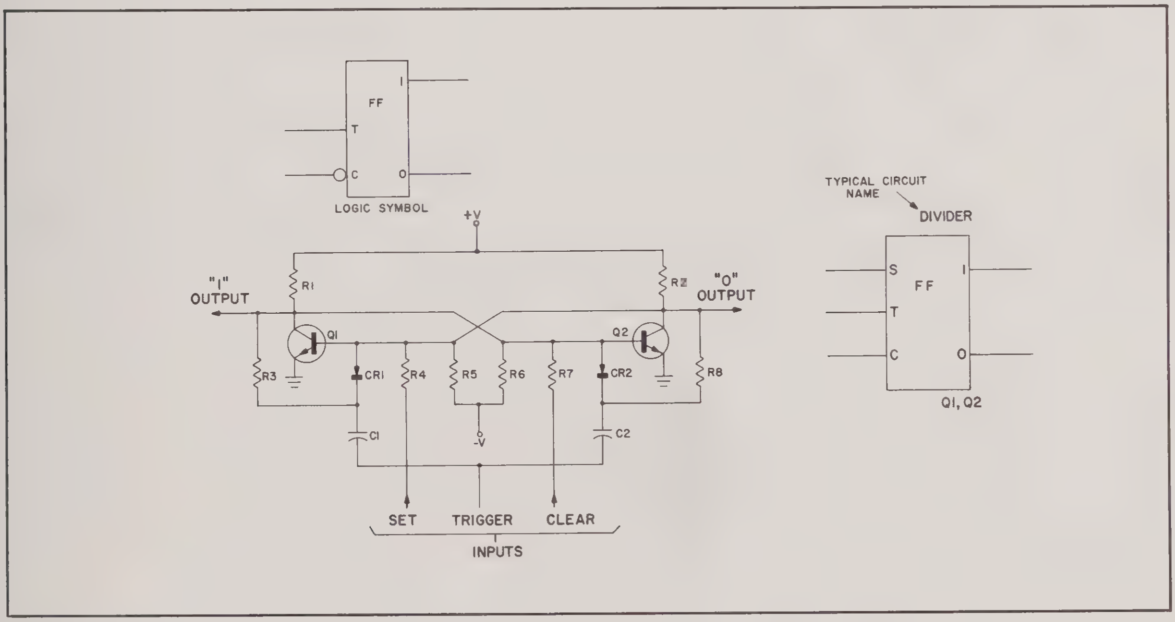
ACTIVE CIRCUIT		OUTPUT
X	Y	F
L	L	L
L	H	L
H	L	L
H	H	H

ACTIVE CIRCUIT		OUTPUT
U	V	F
L	L	L
L	H	H
H	L	H
H	H	H

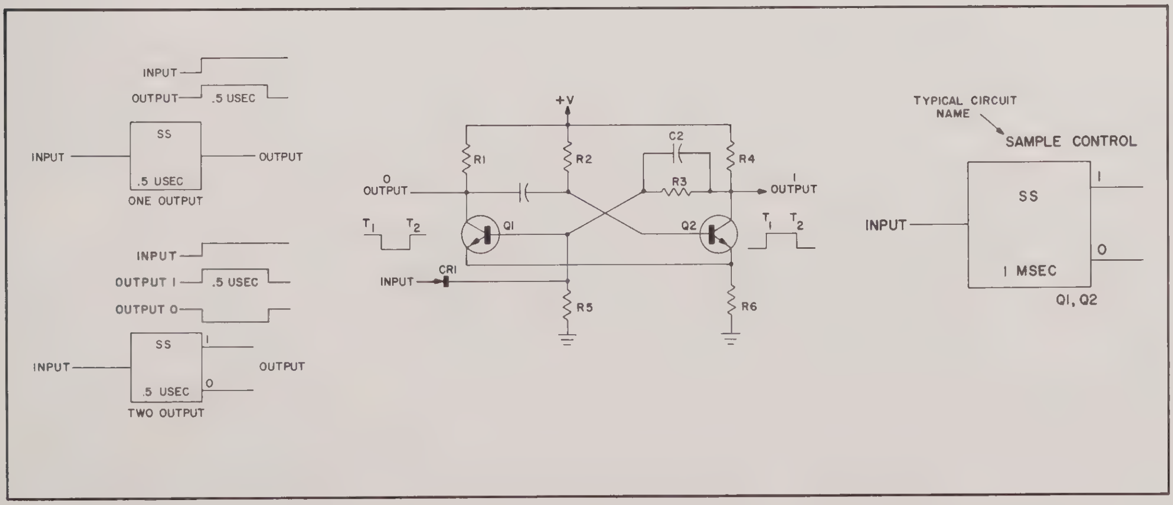
Outputs Connected for AND and OR Functions (with Combinations Tables)



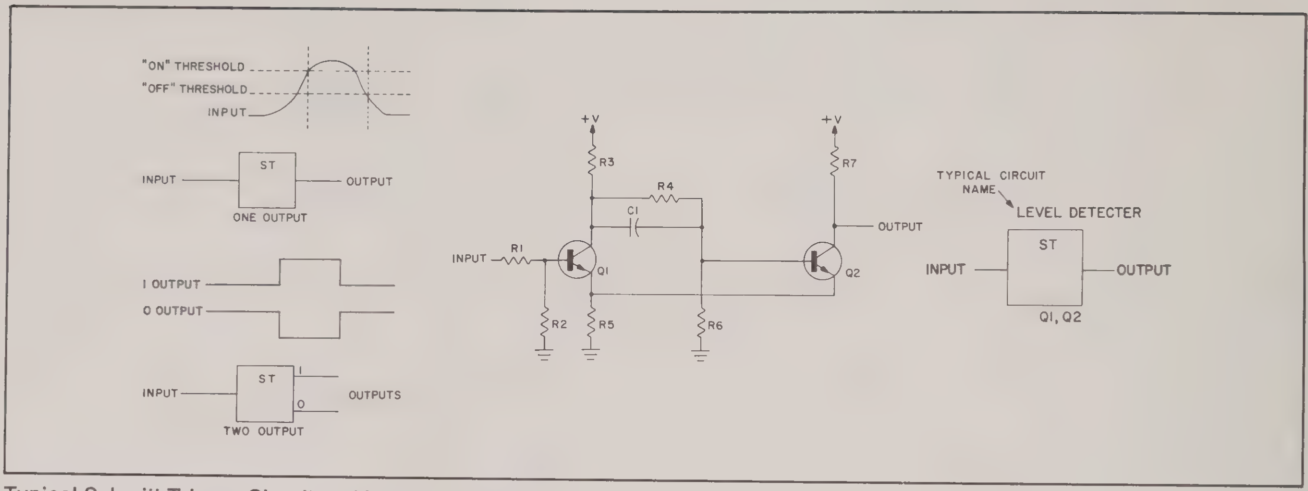
Amplifier Symbols and Typical Circuits and Logic Drawings



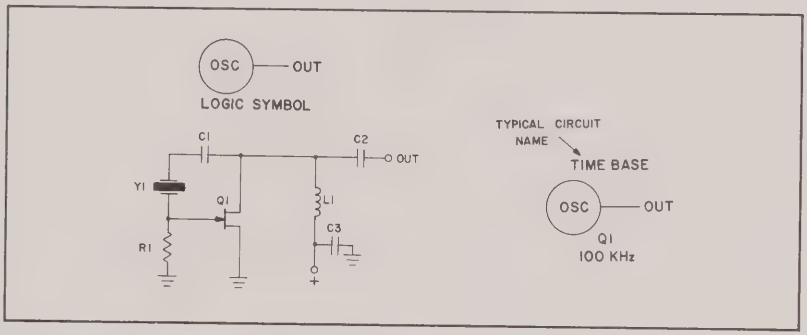
Logic Symbol and Typical Flip-Flop Circuit and Symbol Applications



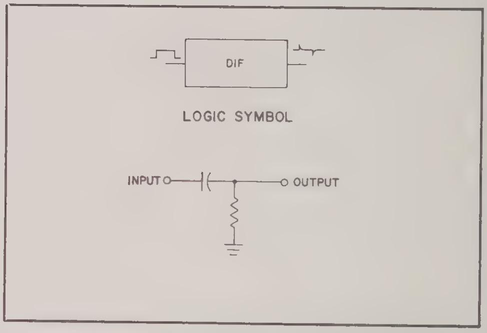
Typical Single-Shot (Monostable Multivibrator) Circuit and Logic Drawing



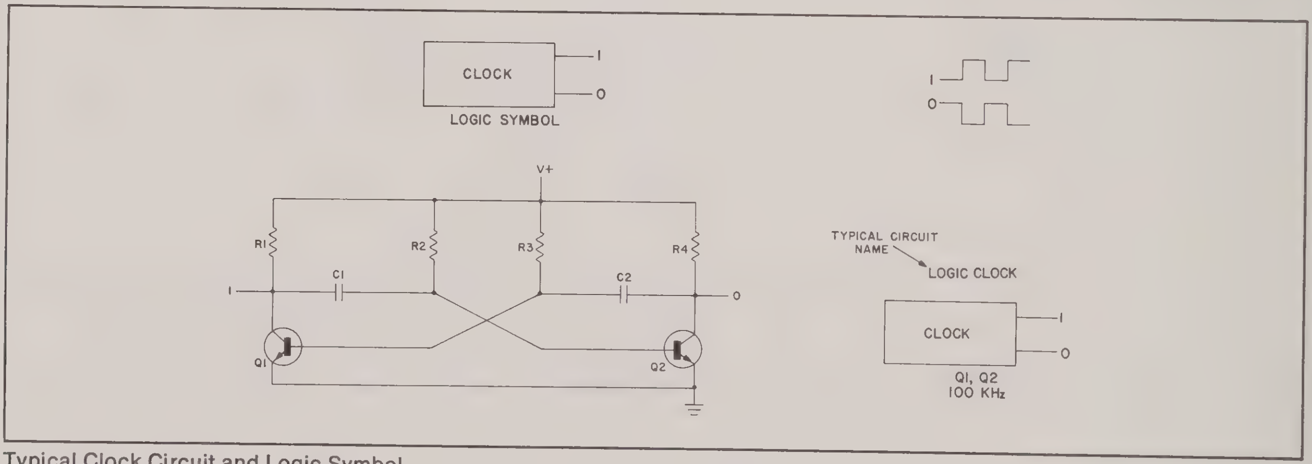
Typical Schmitt Trigger Circuit and Logic Drawing



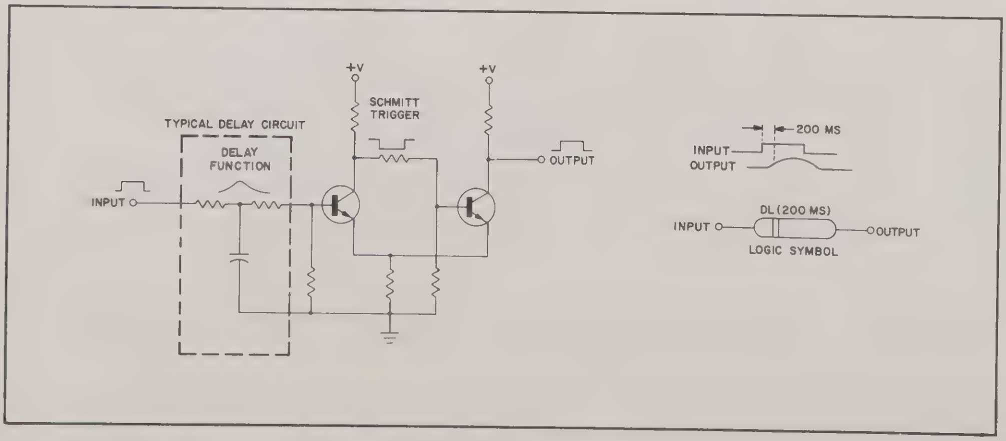
Typical Oscillator Circuit and Logic Symbol



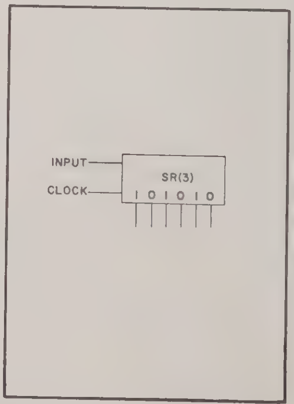
Differentiator Logic Symbol and Typical Circuit



Typical Clock Circuit and Logic Symbol

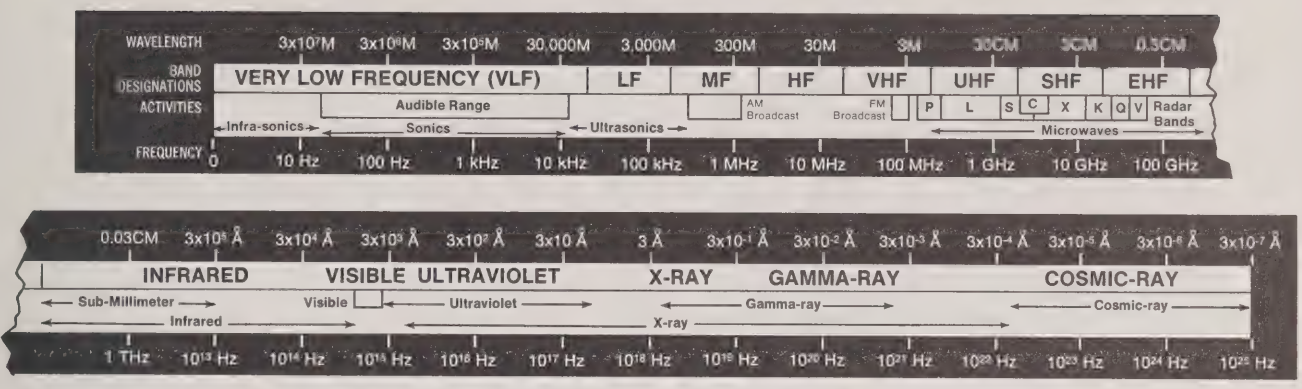


Time Delay Logic Symbol and Typical Circuit Application

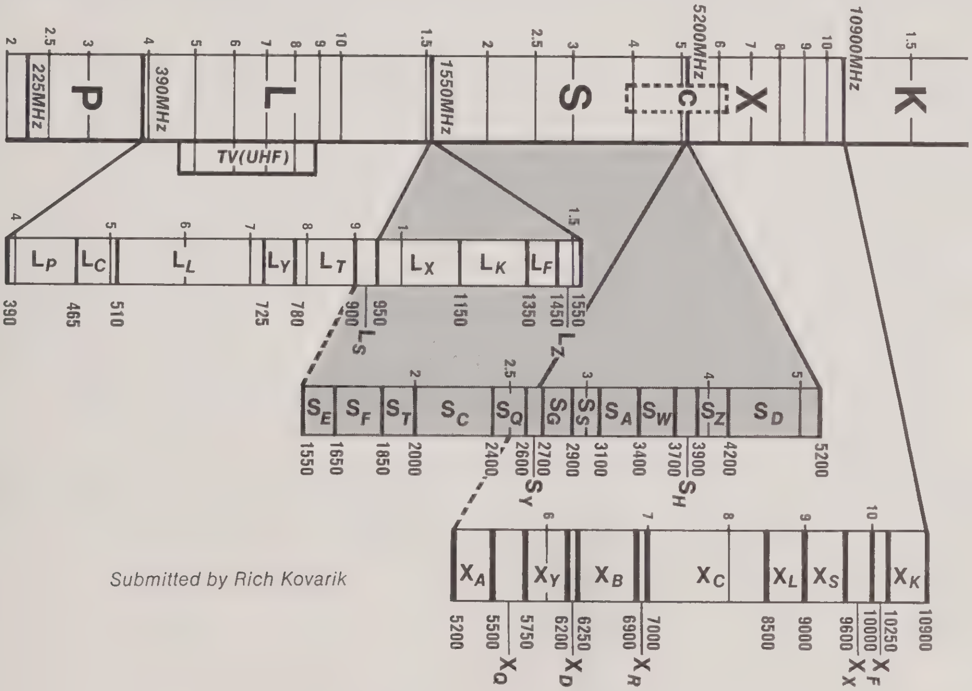


Typical Symbol for a Three-Stage Shift Register

THE ELECTROMAGNETIC SPECTRUM



COMMONLY USED MICROWAVE LETTER BAND DESIGNATIONS



Submitted by Rich Kovarik

FREQUENCY BANDS

Frequency	Band	Abbreviation
3-30 kHz	Very low frequencies	VLF
30-300 kHz	Low frequencies	LF
300-3,000 kHz	Medium frequencies	MF
3-30 MHz	High frequencies	HF
30-300 MHz	Very high frequencies	VHF
300-3,000 MHz	Ultra-high frequencies	UHF
3,000-30,000 MHz	Super-high frequencies	SHF
30,000-300,000 MHz	Extremely high frequencies	EHF
300,000-3,000,000 MHz	....	....

CITIZEN BANDS

Citizens Band channels authorized for Class D CB operation are:

1—26.965 MHz
2—26.975 MHz
3—26.985 MHz
4—27.005 MHz
5—27.015 MHz
6—27.025 MHz
7—27.035 MHz
8—27.055 MHz
9—27.065 MHz
10—27.075 MHz
11—27.085 MHz
12—27.105 MHz
13—27.115 MHz
14—27.125 MHz
15—27.135 MHz
16—27.155 MHz
17—27.165 MHz
18—27.175 MHz
19—27.185 MHz
20—27.205 MHz
21—27.215 MHz
22—27.225 MHz
23—27.255 MHz

Channels used by Part 15 CB stations are:

A—26.995 MHz
B—27.045 MHz
C—27.095 MHz
D—27.145 MHz
E—27.195 MHz
F—27.235 MHz
G—27.045 MHz
H—27.265 MHz

U. S. AMATEUR RADIO BANDS

Bands	Frequency (MHz)
160 Meter Band	1.80-2.00*
80 Meter Band	3.50-4.00
40 Meter Band	7.00-7.30
20 Meter Band	14.00-14.35
15 Meter Band	21.00-21.45
10 Meter Band	28.00-29.70
6 Meter Band	50-54
2 Meter Band	144-148
1¼ Meter Band	220-225
¾ Meter Band	420-450
....	1,215-1,300
....	2,300-2,450
....	3,300-3,500
....	5,650-5,925
....	10,000-10,500
....	21,000-22,000
....	All above 40,000

**Use of this band is on a shared basis with Loran-A system of navigation.*

TELEVISION CHANNEL FREQUENCIES

VHF Channels 2-13 • UHF Channels 14-83

Bandwidth per channel, 6 megacycles.

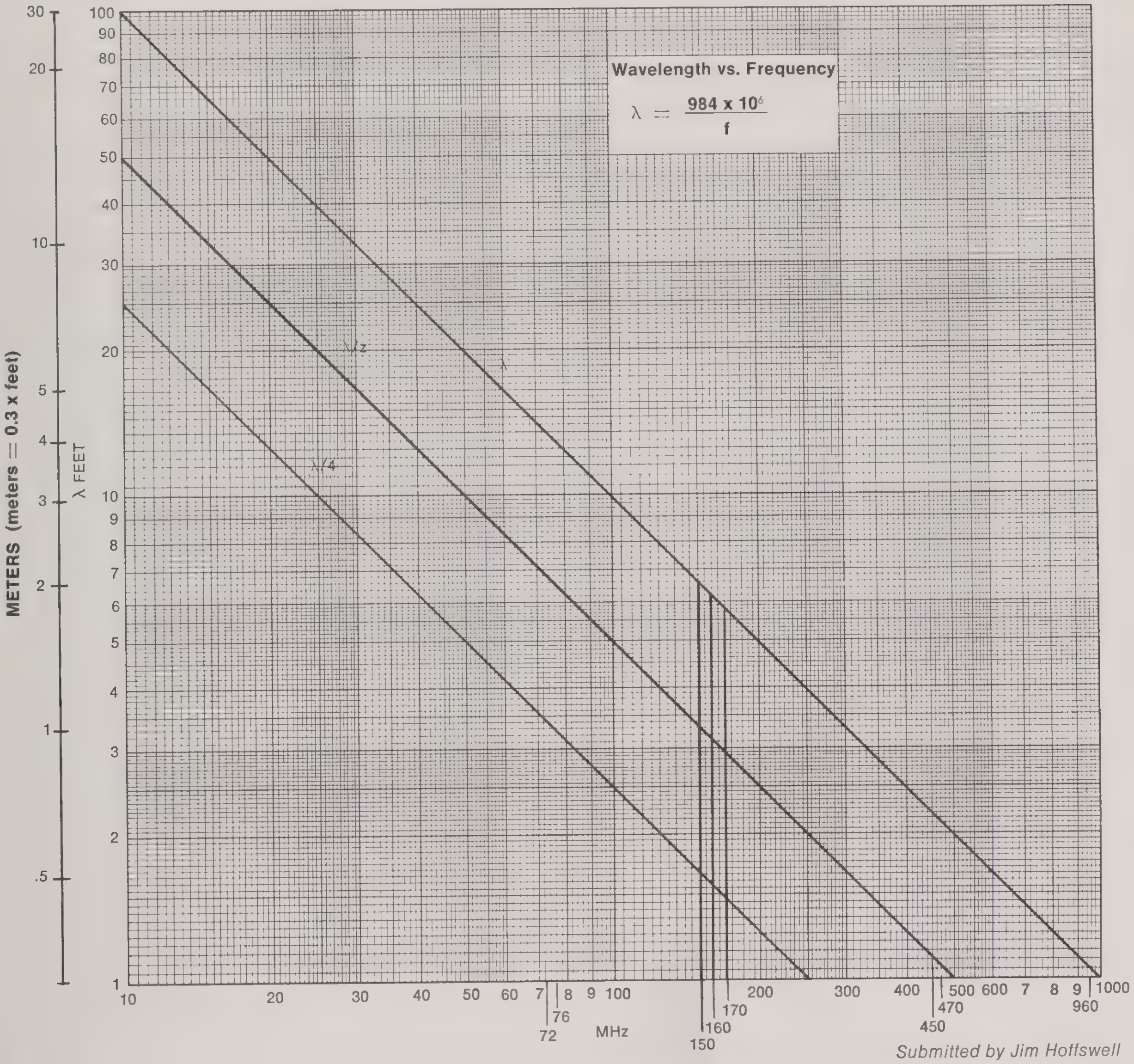
Picture carrier frequency is 1.25 megacycles above the low frequency edge of the band.

Sound carrier frequency is 0.25 megacycles below the high frequency edge of the band, and 4.5 megacycles above the picture carrier frequency.

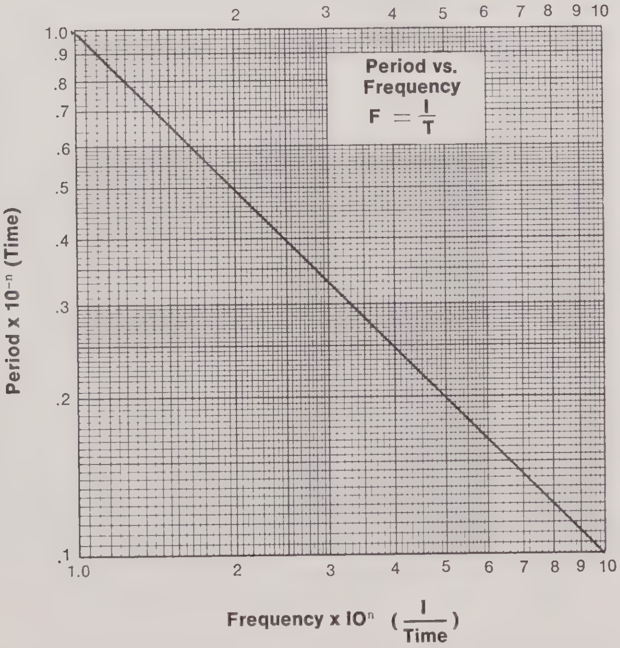
Channel	Frequency Limits (MHz)	Video Carrier (MHz)	Audio Carrier (MHz)
1		(Not assigned)	
2	54-60	55.25	59.75
3	60-66	61.25	65.75
4	66-72	67.25	71.75
5	76-82	77.25	81.75
6	82-88	83.25	87.75
7	174-180	175.25	179.75
8	180-186	181.25	185.75
9	186-192	187.25	191.75
10	192-198	193.25	197.75
11	198-204	199.25	203.75
12	204-210	205.25	209.75
13	210-216	211.25	215.75
14	470-475	471.25	475.75
15	476-482	477.25	481.75
16	482-488	483.25	487.75
17	488-494	489.25	493.75
18	494-500	495.25	499.75
19	500-506	501.25	505.75
20	506-512	507.25	511.75
21	512-518	513.25	517.75
22	518-524	519.25	523.75
23	524-530	525.25	529.75
24	530-536	531.25	535.75
25	536-542	537.25	541.75
26	542-548	543.25	547.75
27	548-554	549.25	553.75
28	554-560	555.25	559.75
29	560-566	561.25	565.75
30	566-572	567.25	571.75
31	572-578	573.25	577.75
32	578-584	579.25	583.75
33	584-590	585.25	589.75
34	590-596	591.25	595.75
35	596-602	597.25	601.75
36	602-608	603.25	607.75
37	608-614	609.25	613.75
38	614-620	615.25	619.75
39	620-626	621.25	625.75
40	626-632	627.25	631.75

Channel	Frequency Limits (MHz)	Video Carrier (MHz)	Audio Carrier (MHz)
41	632-638	633.25	637.75
42	638-644	639.25	643.75
43	644-650	645.25	649.75
44	650-656	651.25	655.75
45	656-662	657.25	661.75
46	662-668	663.25	667.75
47	668-674	669.25	673.75
48	674-680	675.25	679.75
49	680-686	681.25	685.75
50	686-692	687.25	691.75
51	692-698	693.25	697.75
52	698-704	699.25	703.75
53	704-710	705.25	709.75
54	710-716	711.25	715.75
55	716-722	717.25	721.75
56	722-728	723.25	727.75
57	728-734	729.25	733.75
58	734-740	735.25	739.75
59	740-746	741.25	745.75
60	746-752	747.25	751.75
61	752-758	753.25	757.75
62	758-764	759.25	763.75
63	764-770	765.25	769.75
64	770-776	771.25	775.75
65	776-782	777.25	781.75
66	782-788	783.25	787.75
67	788-794	789.25	793.75
68	794-800	795.25	799.75
69	800-806	801.25	805.75
70	806-812	807.25	811.75
71	812-818	813.25	817.75
72	818-824	819.25	823.75
73	824-830	825.25	829.75
74	830-836	831.25	835.74
75	836-842	837.25	841.75
76	842-848	843.25	847.75
77	848-854	849.25	853.75
78	854-860	855.25	859.75
79	860-866	861.25	865.75
80	866-872	867.25	871.75
81	872-878	873.25	877.75
82	878-884	879.25	883.75
83	884-890	885.25	889.75

Submitted by Dan Newby

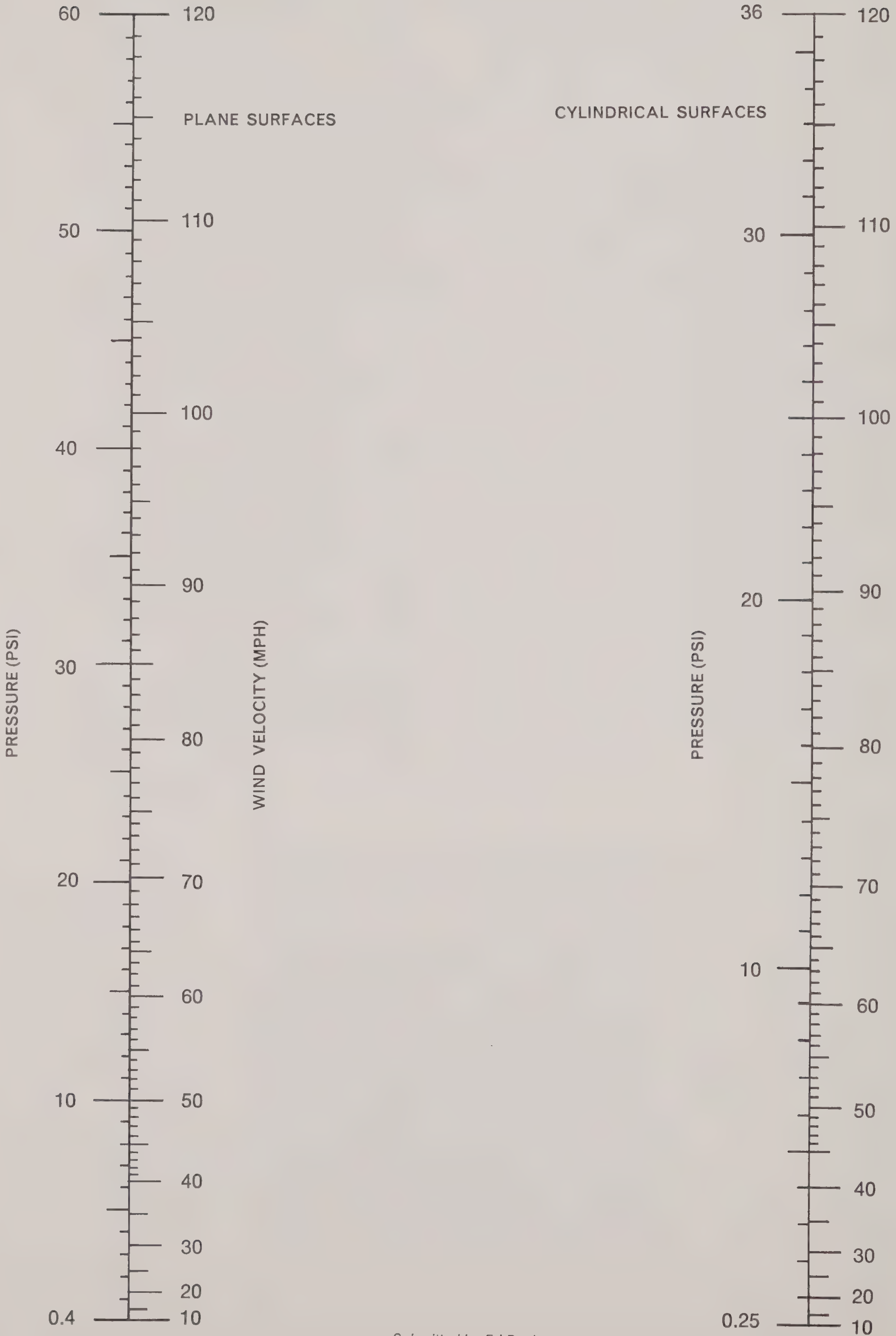


Submitted by Jim Hoffswell



Submitted by Rich Kovarik

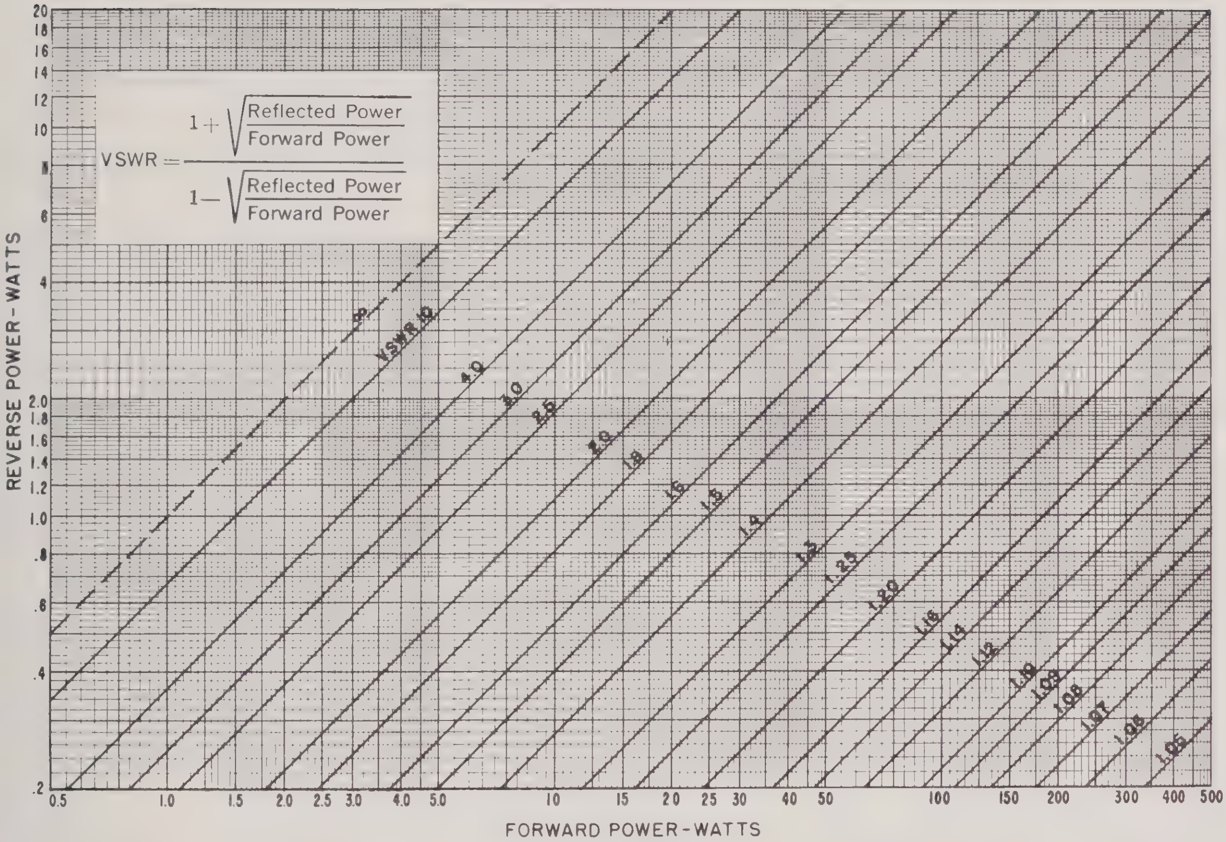
PRESSURE VS. WIND VELOCITY NOMOGRAM



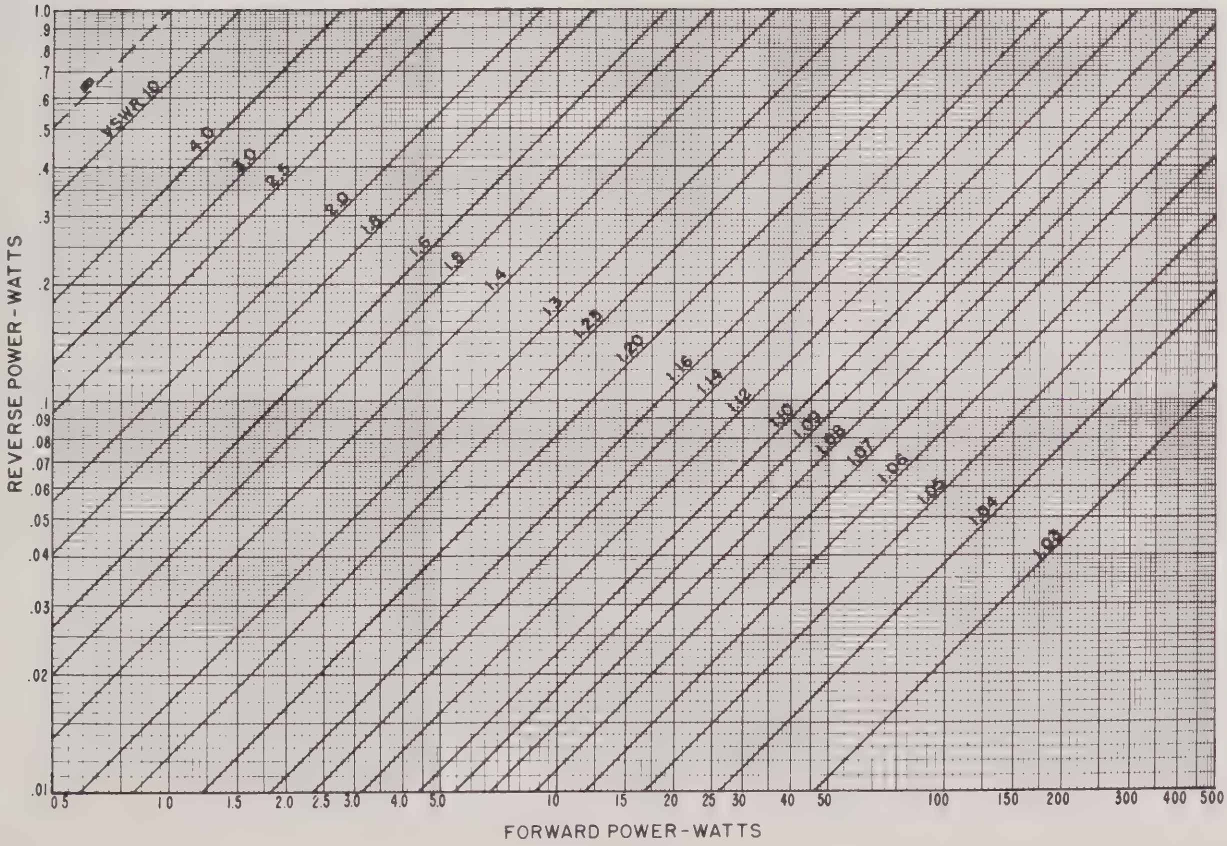
Submitted by Ed Bachner

VSWR NOMOGRAPHS

Power Values vs. VSWR



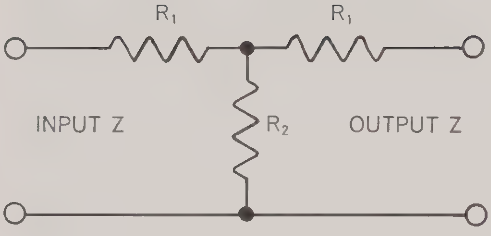
$$\text{VSWR} = \frac{1 + \sqrt{\dfrac{\text{Reflected Power}}{\text{Forward Power}}}}{1 - \sqrt{\dfrac{\text{Reflected Power}}{\text{Forward Power}}}}$$



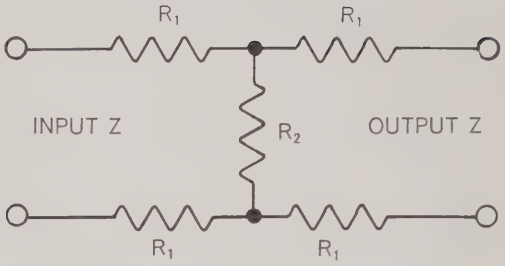
Submitted by Dan Newby and Bob Pearson.

ATTENUATOR NETWORK

600 ohms



UNBALANCED



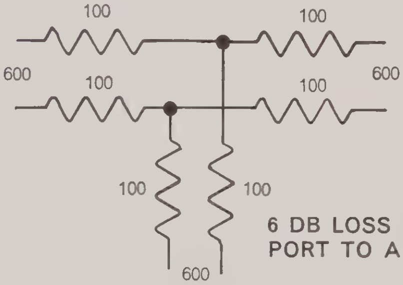
BALANCED

DB LOSS	R_1	R_2	DB LOSS	R_1	R_2	DB LOSS	R_1	R_2	DB LOSS	R_1	R_2
0.5	17.2	10464	16	435.8	195.1	0.5	8.6	10464	16	217.9	195.1
1	34.5	5208	17	451.5	172.9	1	17.25	5208	17	225.7	172.9
2	68.8	2582	18	465.8	152.5	2	34.4	2582	18	232.9	152.5
3	102.7	1703	19	479.0	136.4	3	51.3	1703	19	239.5	136.4
4	135.8	1249	20	490.4	121.2	4	67.9	1249	20	245.2	121.2
5	168.1	987.6	22	511.7	95.9	5	84.1	987.6	22	255.9	95.9
6	199.3	803.4	24	528.8	76.0	6	99.7	803.4	24	264.4	76.0
7	229.7	685.2	26	542.7	60.3	7	114.8	685.2	26	271.4	60.3
8	258.4	567.6	28	541.1	47.8	8	129.2	567.6	28	277.0	47.0
9	285.8	487.2	30	563.0	38.0	9	142.9	487.2	30	281.6	38.0
10	312.0	421.6	32	570.6	30.2	10	156.0	421.6	32	285.3	30.2
11	336.1	367.4	34	576.5	24.0	11	168.1	376.4	34	288.3	24.0
12	359.1	321.7	36	581.1	19.0	12	179.5	321.7	36	290.6	19.0
13	380.5	282.8	38	585.1	15.1	13	190.3	282.8	38	292.5	15.1
14	400.4	249.4	40	588.1	12.0	14	200.2	249.4	40	234.1	12.0
15	418.8	220.4				15	209.4	220.4			

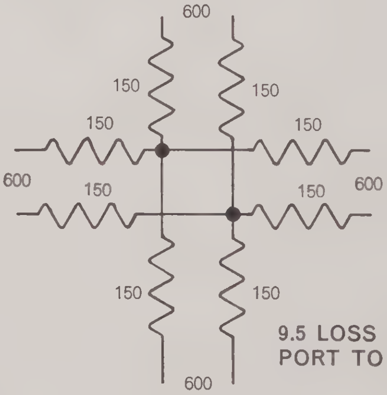
Note: Values above are for 600 ohms. For 50 ohm networks, multiply by 1/12.

Submitted by Jim Hoffswell

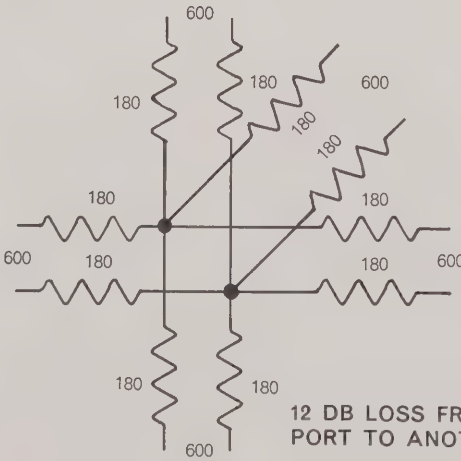
MULTIPLE TERMINATION MATCHING PADS



6 DB LOSS FROM ANY PORT TO ANOTHER



9.5 LOSS FROM ANY PORT TO ANOTHER



12 DB LOSS FROM ANY PORT TO ANOTHER

For 6-600 ohm inputs use 200 ohm resistors in a similiar configuration to above. Loss from one port to any other port will be approximately 14 db.

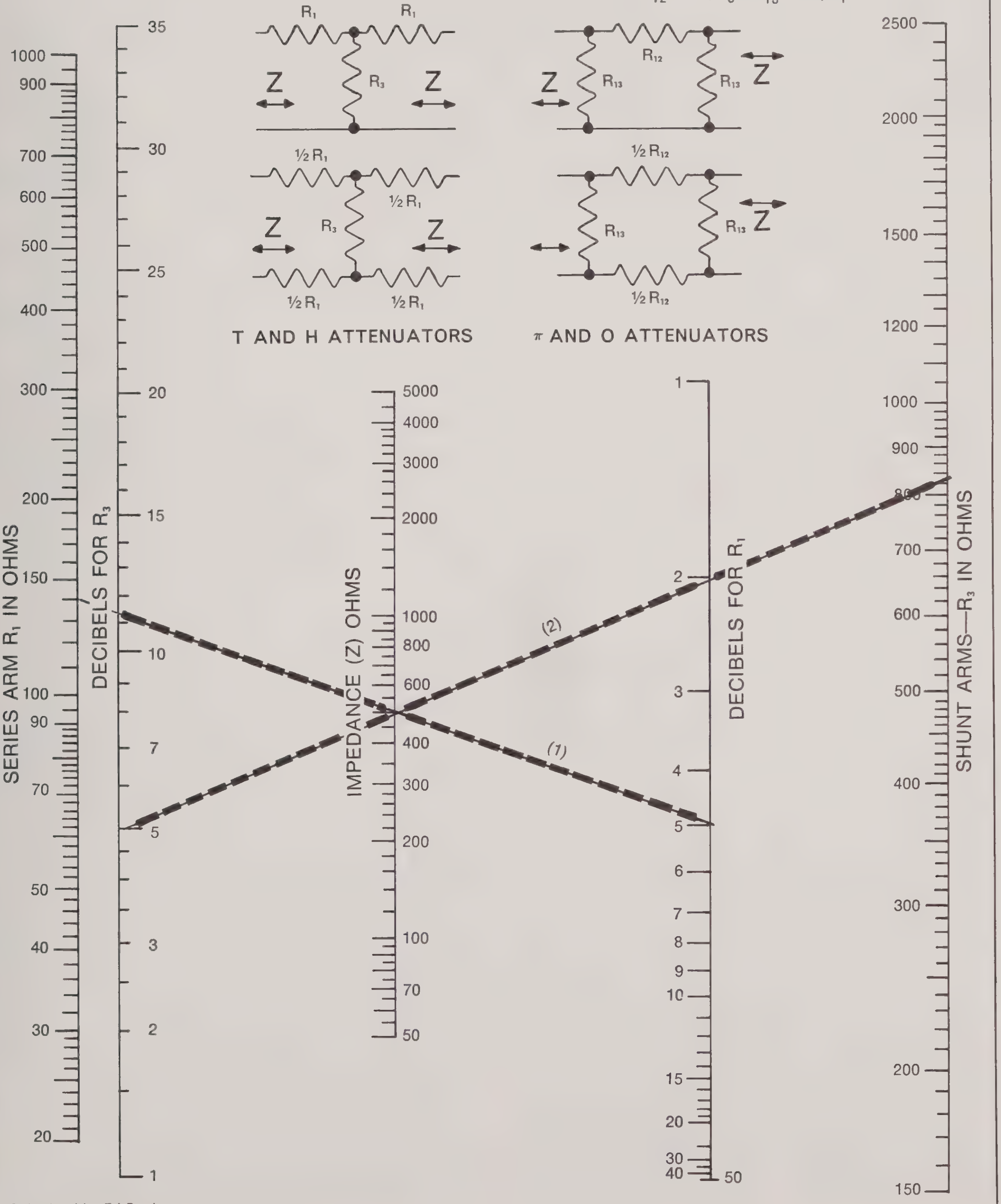
Submitted by Dan Newby

SYMMETRICAL T AND H ATTENUATORS

A straight line through "Decibels for R_1" and "Impedance" gives value of R_1. Another line through "Decibels for R_3" and "Impedance" gives value of R_3 for T and H attenuators. Example shows design of a 500-ohm attenuator with a 5-db loss. The value of R_1 is 140 ohms and that of R_3 is 822 ohms.

For symmetrical π and O attenuators, the nomograph is used to determine values of R_1 and R_3. The values of R_{12} and R_{13} are then given by the following equations:

$$R_{12} = Z^2/R_3 \quad R_{13} = Z^2/R_1.$$



Submitted by Ed Bachner

DEVIATION METER CALIBRATION BESSEL FUNCTION METHOD

Submitted by Ken Sypal

The deviation accuracy of a generator may be checked by the Bessel function method (carrier null). The generator can then be used to calibrate other deviation reading equipment.

The carrier null can be easily detected by connecting a simple crystal filter at the primary of the discriminator just off the collector of the second limiter, with the circuit shown in Figure 1. Any receiver having a 455 kHz i-f may be used.

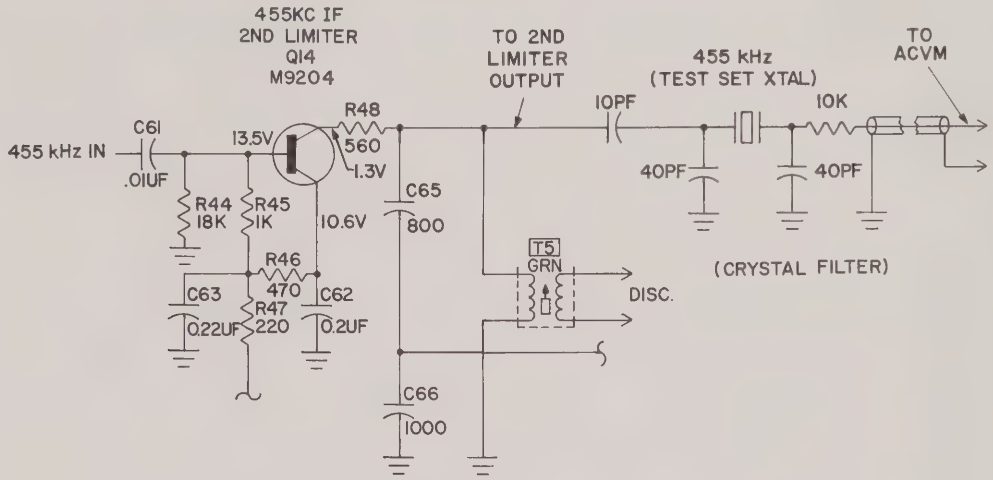


Fig. 1 (Typical Motrac I-F Limiter)

TECHNIQUE

Connect an audio generator (Motorola S-1067A) to the ext audio input of the RF signal generator (Motorola S-1318A). Place the generator in ext mode with the deviation control set at mid-range. Set the audio oscillator frequency to one of the specific frequencies listed on the null chart. Connect the r-f generator output to the receiver antenna. (Make certain the generator has been well warmed up to minimize drift.) Using a full quieting on channel signal (100 microvolts or better) tune for a peak indication on the ACVM (AC Voltmeter) by rocking the generator frequency slightly within the i-f band pass of the receiver. Slowly advance the audio oscillator output until a null is observed on the ACVM. This is the first Bessel null and represents a specific peak deviation. The reading on the signal generator should match that indicated in the null chart. Continue to advance the deviation control. The ACVM will rise and then again drop into another null. This is the second Bessel null and again represents a specific peak deviation. This procedure can be continued for a 3rd, 4th, and 5th; each null being successively less pronounced.

The accompanying chart lists several commonly used generator modulating frequencies, nulls, and the peak deviation they represent.

BESSEL NULL CHART

Modulating Frequencies Hz.

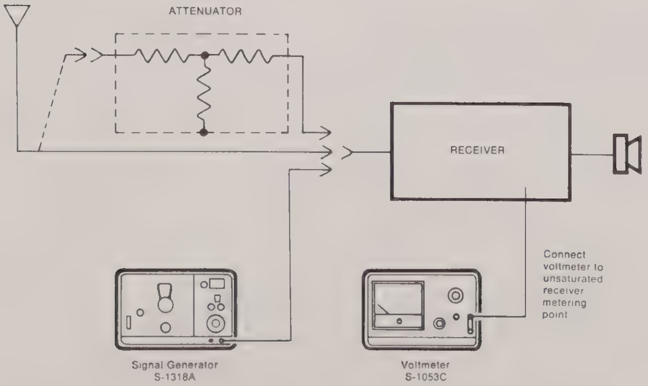
Peak deviation	First Null	Second Null	Third Null	Fourth Null
1 kHz	415.8	181.1	115.8	84.8
5 kHz	2070	905.7	579.1	424
15 kHz	6237	2714	1737	1272

RULE OF THUMB:

Note that the modulating frequencies for a given null have approximately the same multiple relationship as the corresponding peak deviations, i.e., for the first null, 1 kHz at 416 Hz, 5 kHz at 5 x 416 = 2080 Hz, and 15 kHz at 15 x 416 = 6240 Hz.

IDENTIFYING RECEIVER PRODUCED INTERMODULATION

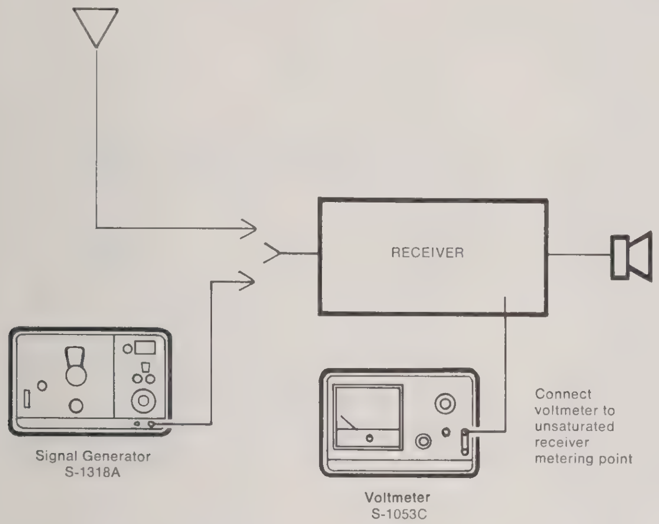
Submitted by Ed Bachner



1. With antenna connected to receiver, note indication produced by IM product at meter.
2. Substitute signal generator for antenna, advance output until identical meter indication is obtained. Note generator output.
3. Now, connect antenna through attenuator of known loss (signal generator pad perhaps) to receiver. Note indication now produced by product at meter.
4. Substitute signal generator at receiver input, advance output to yield identical indication, and note generator output.
5. If the difference between signal generator outputs is equal to attenuator loss, the IM product *is not* being produced within the receiver.
6. If the difference exceeds attenuator loss (usually by three or more times), the IM product *is* being produced in the receiver.

MEASURING RECEIVER INPUT LEVEL

Submitted by Ed Bachner

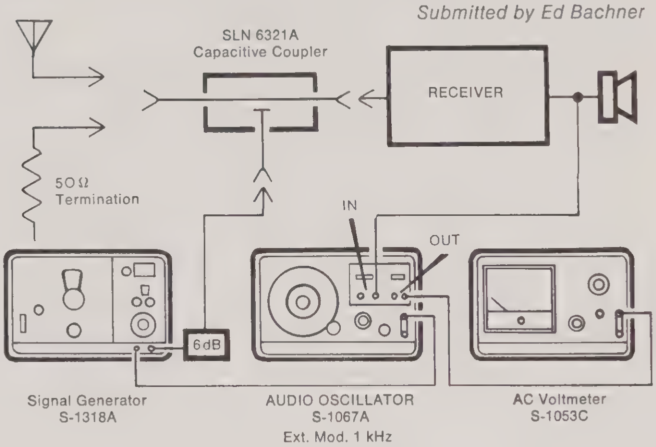


Connect voltmeter to unsaturated receiver metering point

1. With antenna connected to the receiver, observe the indication of the voltmeter when undesired signal is present.
2. Substitute signal generator for the antenna and adjust signal generator to the receiver frequency.
3. Advance signal generator output to yield a meter indication identical to that obtained in step 1.
4. Read undesired signal level from the signal generators output calibration.

MEASURING EFFECTIVE SENSITIVITY

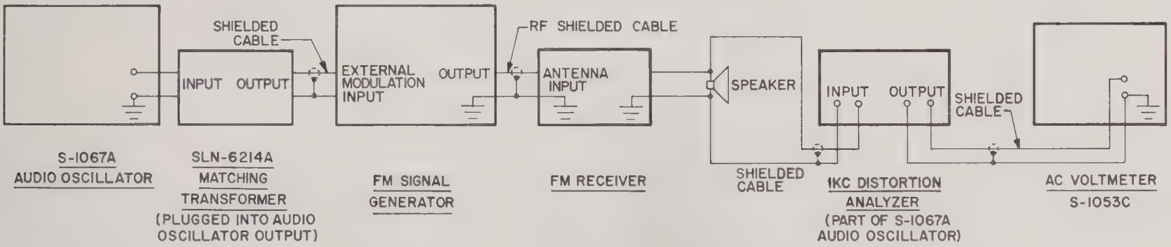
Submitted by Ed Bachner



1. Measure and record basic sensitivity of the receiver.
2. Connect test setup as shown above. Apply resistive termination to capacitive coupler, adjust coupling so that quieting is obtained with generator output in the range of 2K to 5K microvolts.
3. Measure and record sensitivity of receiver through the capacitive coupler.
4. Substitute antenna for resistive termination. Again, measure sensitivity and record.
5. Calculate effective sensitivity as follows:

$$\text{Effective Sensitivity} = \underset{\text{(Step 1)}}{\text{Basic Sensitivity}} \times \frac{\overset{\text{(Step 4)}}{\text{Sensitivity with antenna}}}{\underset{\text{(Step 3)}}{\text{Sensitivity with termination}}}$$

EIA SINAD SENSITIVITY MEASUREMENT *Submitted by Ken Sypal*



Typical Test Set-Up For EIA SINAD Receiver Sensitivity Measurement

1. Connect the test equipment to the receiver as indicated.
2. Turn on all test equipment and apply power to the receiver.
3. Adjust the OFF-AMPLITUDE control on the audio oscillator for minimum output.
4. Set the FM signal generator to the receiver frequency and its output to 1000 microvolts.
5. Set the audio oscillator output frequency to 1 kc and adjust the OFF-AMPLITUDE control for a deviation reading on the FM signal generator of ⅔ of the maximum rated receiver deviation.
6. Adjust the receiver volume control to obtain the rated audio output. The a-c voltmeter can be used to measure the audio output voltage if the power output rating and speaker impedance are known by using the formula $V = \sqrt{PR}$. For example, if the audio output rating is 5 watts and the speaker impedance is 3.2 ohms, then $V \text{(rms)} = \sqrt{5 \times 3.2} = 4$ volts.
7. Move the LEVEL-BALANCE slide switch on the audio oscillator to the LEVEL position. Adjust the LEVEL control for an a-c voltmeter reading of 1 volt, full scale.
8. Move the LEVEL-BALANCE slide switch to the BALANCE position. Adjust the BALANCE control for a dip or minimum reading on the a-c voltmeter. Use the meter scale of the a-c voltmeter that will provide a mid-scale reading.
9. Adjust the audio oscillator fine-frequency adjust control to obtain a dip or minimum reading on the a-c voltmeter.
10. Repeat Steps (8) and (9), in that order.

The a-c voltmeter reading obtained in Step (10) is the receiver distortion level in percentage. This figure is not used for the sensitivity measurement, however, the control settings to obtain this figure are used, therefore, DO NOT disturb the BALANCE control setting or the audio frequency setting after completing Step (10).

11. Set the a-c voltmeter to its 1-volt full scale range. Move the LEVEL-BALANCE slide switch on the audio oscillator to the LEVEL position. Note the a-c voltmeter reading in dB (+2.3 dB is equal to 1 volt).
12. Reduce the output signal level of the FM signal generator (generator output reduced to be approximately equal to 12 dB of the SINAD sensitivity of the receiver) so that the difference in a-c voltmeter reading between the LEVEL-BALANCE slide switch in the LEVEL position and BALANCE position is 12 dB. This function is represented by the expression:

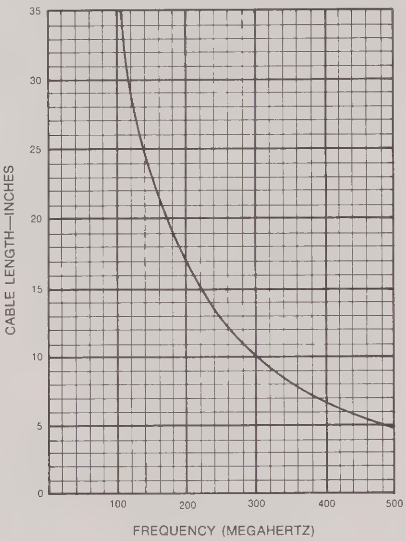
$$\frac{\text{LEVEL}}{\text{BALANCE}} = \frac{\text{Signal + Noise + Distortion}}{\text{Noise + Distortion}} = 12 \text{ dB}$$

NOTE To more quickly obtain the results of Step (12), use the left hand to adjust the signal level of the FM generator and the right hand to move the slide switch back and forth between the LEVEL and BALANCE positions.

13. Read the FM signal generator output in microvolts. At this input level, if the receiver output level is 50% of the rated audio output without readjustment of the receiver volume control (set in Step 6), the r-f input level is the EIA 12 dB SINAD sensitivity of the receiver. If the audio output is less than 50% of the rated audio output, increase the r-f signal input until 50% of full rated audio output is obtained. This level of r-f signal is the EIA 12 dB SINAD sensitivity of the receiver.

Required Length of RG-8/U Cable with Connectors when Added to Bird Model 43 Thruline Wattmeter to Equal ½ Wavelength

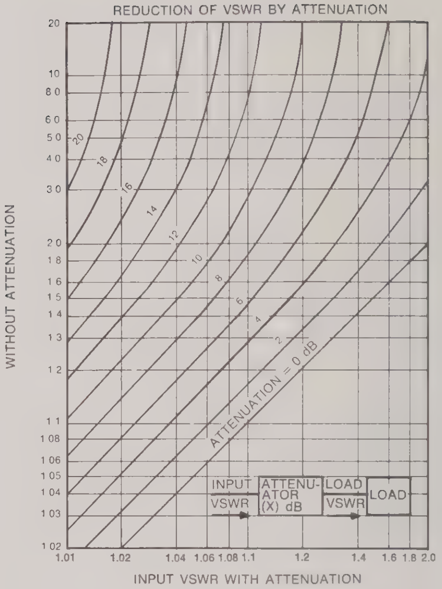
When the load and transmitter are well matched, any error contributed by inserting a Bird model 43 Thruline Wattmeter is negligible (less than 0.06%). At VSWR's of over 1.5 and at frequencies over 100 MHz, line length becomes critical.
Since the impedance oh either side of ½ wavelength is identical, a length of cable can be added to the wattmeter to equal ½ wavelength, thus eliminating any error due to the width (4 inches plus connectors) of the wattmeter. The chart below shows the length of RG-8/U cable and connectors vs. frequency which must be added.

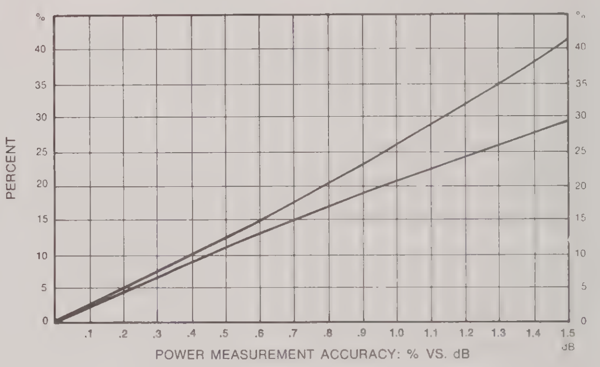


NOTE:

1. When using UHF Plug 259 the cable length is measured from tip to tip of center pin of plugs.
2. When using other connectors the cable length is measured from end to end of outer conductor of connectors.

Submitted by Ed Bachner





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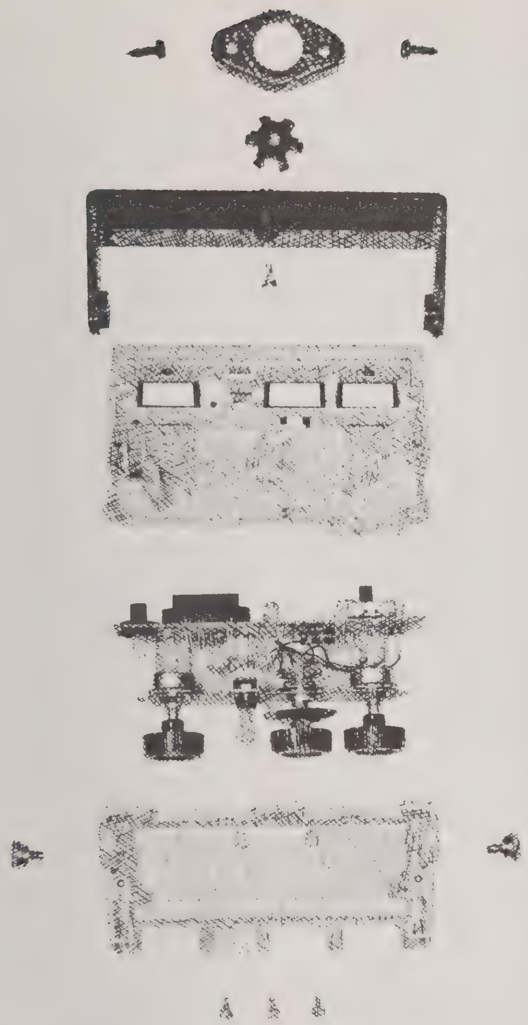

Parts Lists

Extensive line, quality selection, simplified identification

- Complete Information
- Purchasing Economics
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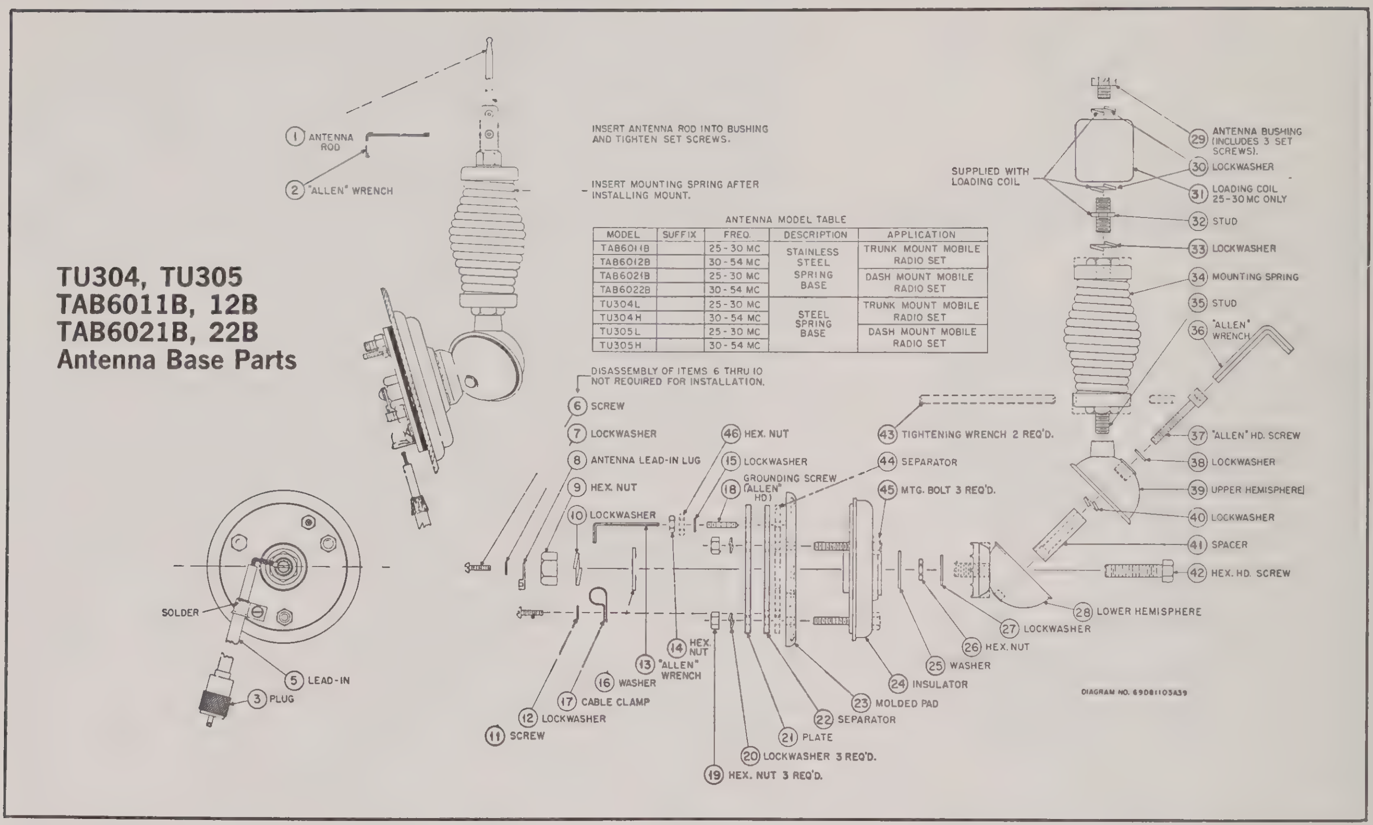
For your convenience, this section features extensive "exploded" views of various replacement parts with corresponding model numbers . . . complete information at a single glance.

Antenna Replacement Parts, Mobile



**TU304, TU305
TAB6011B, 12B
TAB6021B, 22B
Antenna Base Parts**

INSERT ANTENNA ROD INTO BUSHING AND TIGHTEN SET SCREWS.

INSERT MOUNTING SPRING AFTER INSTALLING MOUNT.

ANTENNA MODEL TABLE

MODEL	SUFFIX	FREQ.	DESCRIPTION	APPLICATION
TAB6011B		25 - 30 MC	STAINLESS STEEL SPRING BASE	TRUNK MOUNT MOBILE RADIO SET
TAB6012B		30 - 54 MC		
TAB6021B		25 - 30 MC		DASH MOUNT MOBILE RADIO SET
TAB6022B		30 - 54 MC		
TU304L		25 - 30 MC	STEEL SPRING BASE	TRUNK MOUNT MOBILE RADIO SET
TU304H		30 - 54 MC		
TU305L		25 - 30 MC		DASH MOUNT MOBILE RADIO SET
TU305H		30 - 54 MC		

DISASSEMBLY OF ITEMS 6 THRU 10 NOT REQUIRED FOR INSTALLATION.

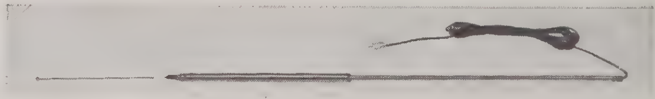
DIAGRAM NO. 69D81103A39

ANTENNA BASE PARTS

REF. NO.	MODEL & PART NO. TU304L, TU304H TU305L, TU305H	MODEL & PART NO. TAB6011B, TAB6012B TAB6021B, TAB6022B
1	47B840613	47B840613
2	66K106515	66K106515
3	28A42310	28A42310
5	TKN6132B (Trunk mount radio set) TKN-6133B (dash mount radio set)	TKN6132B (Trunk mount radio set) TKN-6133B (dash mount radio set)
6	3S6996	3S6996
7, 12, 15	4S7657	4S7657
8	29R3017	
9	2K838910	2S122302
10	4S7694	4S7694
11	3K838908	3-7154
13	66K21442	66K21442
14	2S7003	2-7007
16	4K838909	4S1780
17	42-82788G03	42-82788G03
18	3K838908	3S838908
19	2S2878	2S1384
20	4S119331	4S9747
21	4K838907	64P82021E09
22	4K838906	4S838906
23		75P82021E10
24	14K838905	14P82021E11
25		4P82792G01
26		2P82792G02
27		4S2640
28	58K838904	43P82792G08
29	43A844171	43K844171
30	4S9748	4S9748
31	TJB6071A	TJB6071A
32	46A892924	46A892924
33	4S7685	4S9748
34	51B85936	41B82784G01
35		46P82021E12
36	66K85988	66A82031E01

REF. NO.	MODEL & PART NO. TU304L, TU304H TU305L, TU305H	MODEL & PART NO. TAB6011B, TAB6012B TAB6021B, TAB6022B
37	3K838902	3P82792G06
38	4S7685	4P82792G05
39	58K838903	43P82792G07
40		4S7654
41		4382792G04
42		3P82792G03
43	47A474859	
44	4K838906	
45	3S7328	
46	2S7003	
NON-REFERENCE ASSEMBLY		
	51B85937 Base assembly	1-82782G01 Base assembly
	1V842101 Mounting kit	1V80722A13 Mounting kit

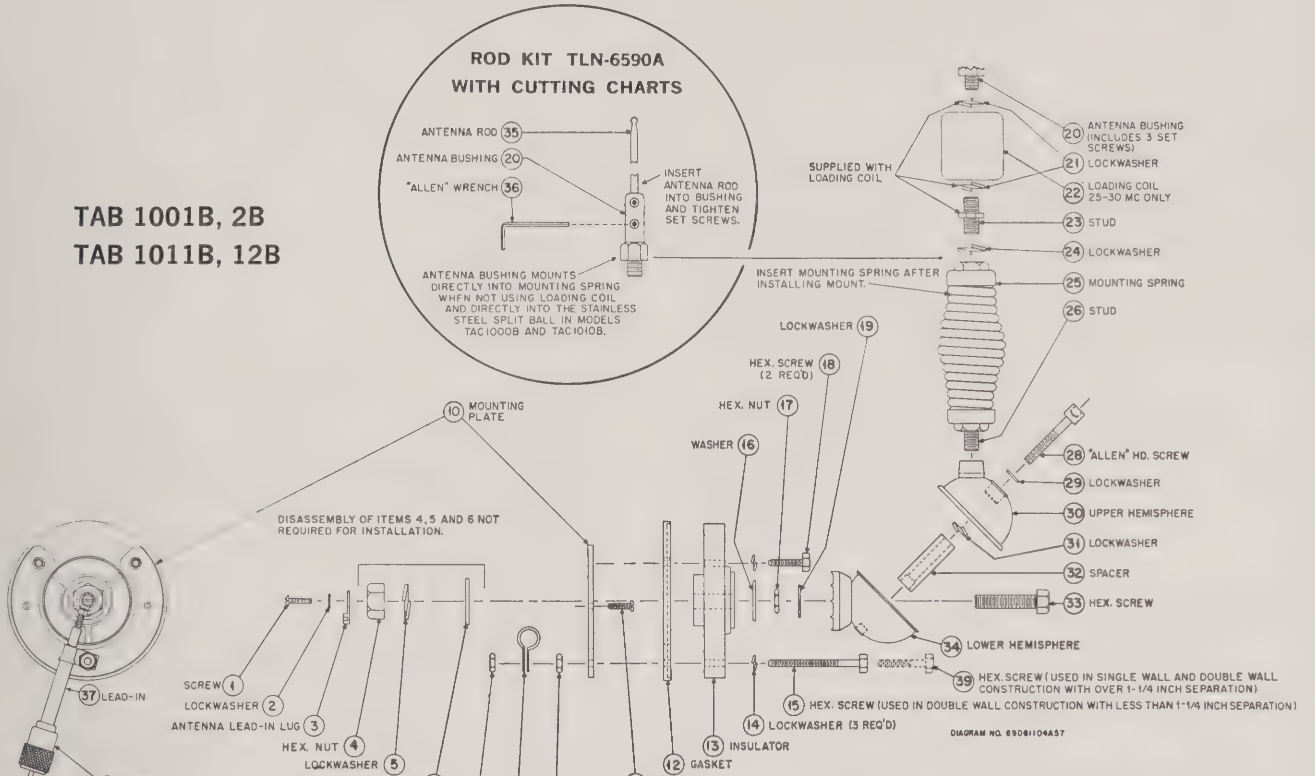
MISCELLANEOUS



PART NUMBER	DESCRIPTION
47-82188A04	For TAD-6050A (132-144 MHz)
47-82188A01	For TAD-6041A (144-150 MHz)
47-82188A02	For TAD-6042A (150-162 MHz)
47-82188A03	For TAD-6043A (162-174 MHz)
47-847860	For TAE-6010A (450-470 MHz)
47-847860	For TAE-6020A (450-470 MHz)
43-82164E01	Bushing, (used on 450-470 MHz only)
15-837066	Rubber Snubber
14-82543E01	Insulator & Ferrule
2-122302	Nut ½ x 20 Stainless Steel (2 used) Replaces 2-121052
3-9717	Set screw, 8-32 x 3/16″
66-21442	Wrench, allen

NOTE: Mast threaded on 132-174 MHz models only.

TAB 1001B, 2B
TAB 1011B, 12B


ROD KIT TLN-6590A
WITH CUTTING CHARTS
ANTENNA ROD (35)
ANTENNA BUSHING (20)
"ALLEN" WRENCH (36)
INSERT ANTENNA ROD INTO BUSHING AND TIGHTEN SET SCREWS.
ANTENNA BUSHING MOUNTS DIRECTLY INTO MOUNTING SPRING WHEN NOT USING LOADING COIL AND DIRECTLY INTO THE STAINLESS STEEL SPLIT BALL IN MODELS TAC1000B AND TAC1010B.
SUPPLIED WITH LOADING COIL
(20) ANTENNA BUSHING (INCLUDES 3 SET SCREWS)
(21) LOCKWASHER
(22) LOADING COIL 25-30 MC ONLY
(23) STUD
(24) LOCKWASHER
INSERT MOUNTING SPRING AFTER INSTALLING MOUNT.
(25) MOUNTING SPRING
(26) STUD
LOCKWASHER (19)
HEX. SCREW (2 REQ'D) (18)
HEX. NUT (17)
WASHER (16)
(10) MOUNTING PLATE
(28) "ALLEN" HD. SCREW
(29) LOCKWASHER
(30) UPPER HEMISPHERE
(31) LOCKWASHER
(32) SPACER
(33) HEX. SCREW
(34) LOWER HEMISPHERE
DISASSEMBLY OF ITEMS 4,5 AND 6 NOT REQUIRED FOR INSTALLATION.
(37) LEAD-IN
(38) PLUG
SCREW (1)
LOCKWASHER (2)
ANTENNA LEAD-IN LUG (3)
HEX. NUT (4)
LOCKWASHER (5)
WASHER (6)
HEX. NUT (7)
CABLE CLAMP (8)
(9) HEX. NUT
(11) SCREW
(12) GASKET
(13) INSULATOR
(14) LOCKWASHER (3 REQ'D)
(15) HEX. SCREW (USED IN DOUBLE WALL CONSTRUCTION WITH LESS THAN 1-1/4 INCH SEPARATION)
(39) HEX. SCREW (USED IN SINGLE WALL AND DOUBLE WALL CONSTRUCTION WITH OVER 1-1/4 INCH SEPARATION)
DIAGRAM NO. 69D81104A57

ANTENNA MODEL TABLE

MODEL	SUFFIX	FREQ.	DESCRIPTION	APPLICATION
TAB1001B		25-30 MC	STAINLESS STEEL SPRING AND BASE	TRUNK MOUNT MOBILE RADIO SET
TAB1002B		30-54 MC		
TAB1011B		25-30 MC		DASH MOUNT MOBILE RADIO SET
TAB1012B		30-54 MC		

ANTENNA BASE PARTS

REFERENCE SYMBOL	MOTOROLA PART NO.
1	3S7162
2	4S7657
3	29K845081
4	2S122302
5	4S7694
6	4S1780
7, 9	2S2878
8	42A82788G03
10	64B82786G01
11	3S9661
12	32A82787G01
13	14C82785G01
14	4S9747
15	3A82789G02
16	4P82792G01
17	2P82792G02
18	3A82789G01
19	4S2640
20	43K844171
21	4S9748
22	TJB6071A
23	46A892924
24	4S9748
25	4182784G01
26	46P82792G09

REFERENCE SYMBOL	MOTOROLA PART NO.
28	3P82792G06
29	4P82792G05
30	43P82792G07
31	4S7654
32	43P8279G04
33	3P82792G03
34	43P82792G08
35	47-840613
Rod Kit with cutting charts includes items 20, 35, and 36.	TLN-6590A
36	66K106515
37 RG8/U order PK-358 (100 ft.) or RG58/U order PK-362 (100 ft.)	
38	28A42310
39	3S490759

NON-REFERENCED ITEMS

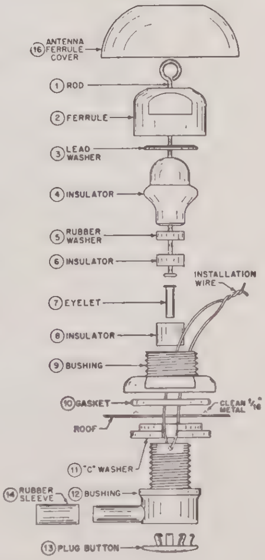
Base Assembly TLN6589B

Cable Assembly (8 ft.)
TKN6132B

Cable Assembly (20 ft.)
TKN6133B

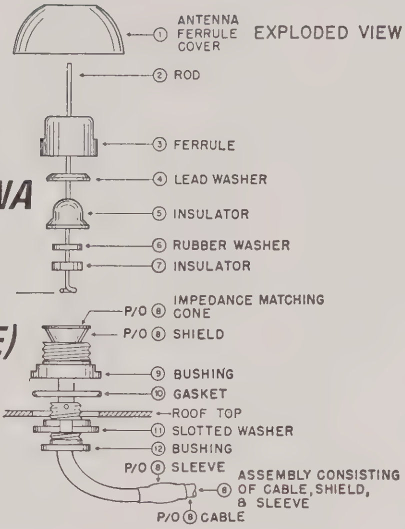
P8553B ROOFTOP TYPE ANTENNA REPLACEMENT PARTS

MOTOROLA PART NO.	REF. SYMBOL	DESCRIPTION
PK 262	1	Rod
43A 480576	2	Ferrule
4A 474911	3	Washer
14A 480572	4	Insulator
4A 480571	5	Washer
14A 480568	6	Insulator
5A 474921	7	Eyelet
14K 480569	8	Insulator
43A 480573	9	Bushing
32A 474917	10	Gasket
4A 474901	11	Washer
43K 480557	12	Bushing
38A 474919	13	Button
37-61348	14	Sleeve
15A 475299	16	Cover
66A 480578	Not Shown	Wrench



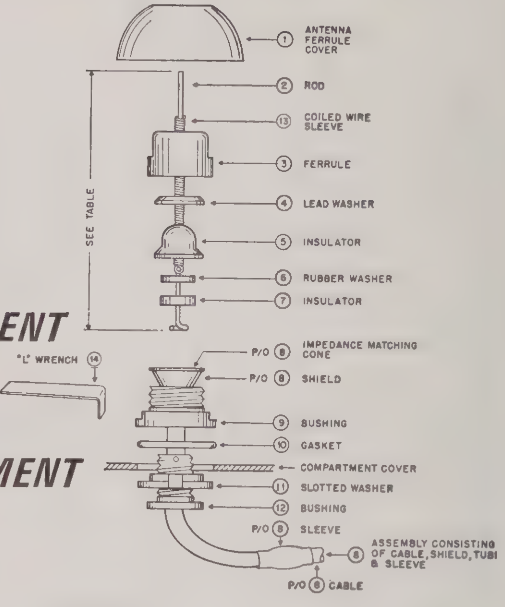
Antenna Replacement Parts, Mobile

TU316, TU265, TU308, ANTENNA REPLACEMENT PARTS (ROOFTOP TYPE)



MOTOROLA PART NO.	REFERENCE SYMBOL	DESCRIPTION
15A 475299	1	Ferrule Cover
PK 262	2	Rod
43A 480576	3	Ferrule
4A 474911	4	Washer, lead
14A 867450	5	Insulator
4A 822404	6	Washer, rubber
14A 867452	7	Insulator
1V 867453	8	Cable & Contact Assembly
43A 480573	9	Bushing (upper)
32A 474917	10	Gasket, Copper Asbestos
4A 474901	11	Washer, (slotted)
43A 839962	12	Bushing (lower)

TU360, NAD6031A, NAD6032A ANTENNA REPLACEMENT PARTS (SERVI-CAR COMPARTMENT MOUNT)



MOTOROLA PART NO.	REFERENCE SYMBOL	DESCRIPTION
15A 475299	1	Cover
PK 262	2	Rod
43K 861791	3	Ferrule
4A 474911	4	Washer
14K 867451	5	Insulator
4A 822404	6	Washer
14A 867452	7	Insulator
1V 867453	8	Assembly, antenna cable*
43K 861789	9	Bushing
32A 474917	10	Gasket
4A 474901	11	Washer
43K 861787	12	Bushing
41A 880115	13	Spring
66A 480578	14	Wrench

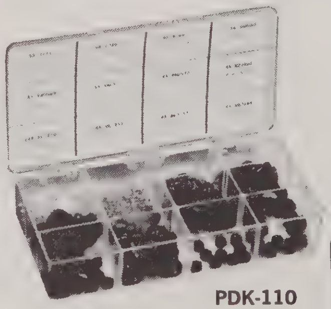
*Order PL-259 plug (28-42310) and adaptor (58-854020) separately.

ROOF TOP ANTENNA ASSORTMENT KITS

PDK-110 and PDK-111

Two kits—one for electrical components and one for mechanical parts—provide a wide variety of parts to service 144-174 mc and 406-470 mc roof-top antennas. Kits include a generous supply of insulators, eyelets, bushings, ferrules, gaskets, hole plugs, etc. Use for TU265, 308, 316, 360, NAD6031A, 32A and P8553B antennas. Each kit is packaged in a sturdy "see thru" plastic box with identification of parts by Motorola number and description.

PDK-110 Electrical Components Antenna Replacement Kit
PDK-111 Mechanical Components Antenna Replacement Kit


PDK-110

PDK-111

PDK-114

This assortment kit was specifically designed for Motorola's new high band and 450MC roof top series of antennas; TAD6111A, 6112A, 6113A.

Kit contains both electrical and mechanical components to service the complete line of these new series of antennas.

PDK-114 Antenna Parts assortment kit

PDK-114

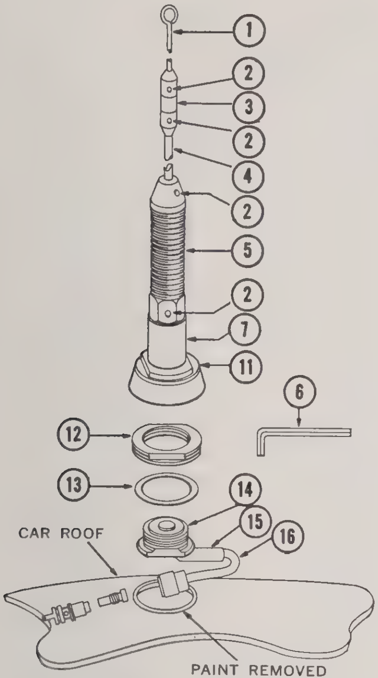


Fig. A

TLE 6211, TLE 6212A
TAE 6071A, TAE 6072A

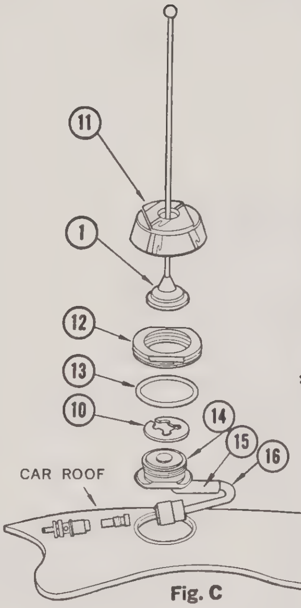


Fig. C

TAD 6111A, 12A, 13A, 14A
TAE 6051A & TAE 6052A

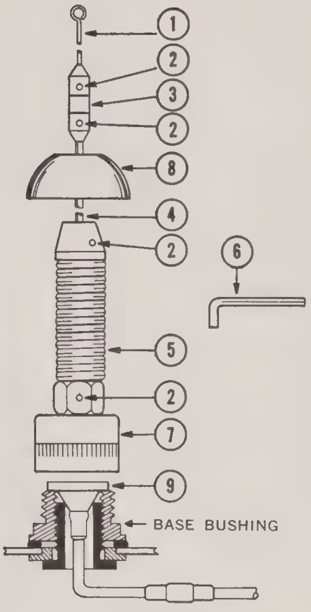


Fig. B

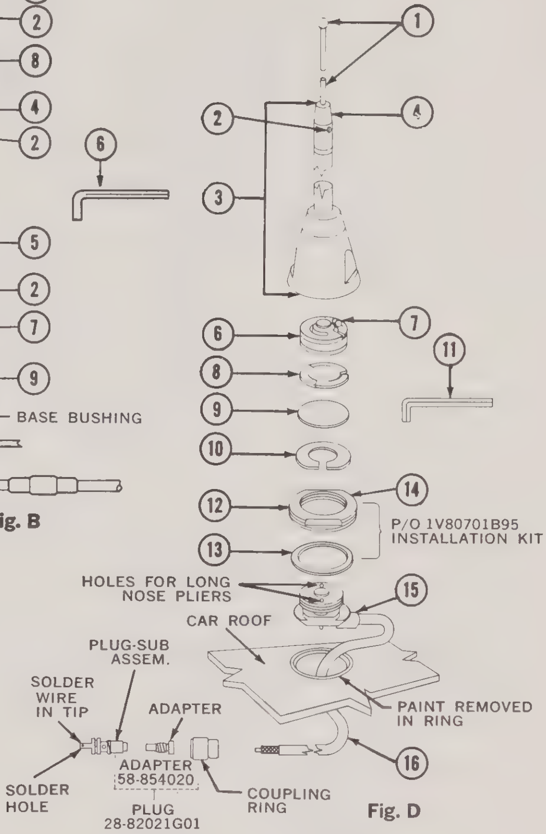


Fig. D

TAE 6030A, TAE 6040A
TLE 6111A, TLE 6112A

ANTENNA REPLACEMENT PARTS LIST

MOTOROLA PART NO.	SYM-BOL	FIG.	DESCRIPTION
47-82120H08	1	A-B	406-420 MHz Ant. Rod 18⅜″ long
47-82120H07	1	A-B	450-470 MHz Ant. Rod 16″ long
1-83938B01	1	C	Ant. Assembly 136-144 MHz Ant. Rod 20¼″ long
1-83938B02	1	C	Ant. Assem. 144-152 MHz Ant. Rod 19³⁄₃₂″ long
1-83938B03	1	C	Ant. Assem. 152-162 MHz Ant. Rod 17¾″ long
1-83938B04	1	C	Ant. Assem. 162-174 MHz Ant. Rod 16⅝″ long
1-83938B05	1	C	Ant. Assem. 406-420 MHz Ant. Rod 6¾″ long
1-83938B06	1	C	Ant. Assem. 450-470 MHz Ant. Rod 6¹⁄₃₂″ long
3-82120H02	2	A-B	Bristol Set Screw
24-82120H06	3	A-B	Loading Coil
47-82120H09	4	A-B	406-420 MHz Bottom Ant. Rod 9¹⁄₁₆″ long
47-82120H05	4	A-B	450-470 MHz Bottom Ant. Rod 7″ long
41-82120H04	5	A-B	Spring Assembly
66-82120H01	6	A-B	Bristol Wrench
7-82120H03	7	B	Adapter and Insulator Assembly
7-82120H10	7	A	Adaptor, Insulator and Gasket Complete Consists of: 1--32-82120H11 Gasket 1-46P82120H12 Stud Assembly 1-14P82120H13 Insulator
15-475299	8	B	Ant. Ferrule Cover
1-867453	9	B	Cable and Contact
4-83780C01	10	C	Spring Washer for 136-152 MHz range only
58-83882B01	11	A-C	Coupling Nut
43-83881B01	12	A-C	Locking Nut
42-83940B01	13	A-C	"O" Ring
1-84551A01	14	A-C	Bushing Assembly 136-152 MHz Replaces 1-83886B01
1-83886B02	14	A-C	Bushing Assembly 406-470 and 152-174 MHz
14-83798C01	15	A-C	Insulator Cap
PK-362	16	A-C	Coaxial Cable 100 ft. RG58/U
1-80703B46	*		Bushing and Cable Assembly Replaces 1-80758A22 152-174 MHz 406-470 MHz
1-80703B45	*		Bushing and Cable Assembly Replaces 1-80754A93 136-152 MHz

*Items not referenced consisting of 14, 15, and 16 (Less coaxial connector assembly)

TAE 6062A MOBILE 5DB 450-470 ROOFTOP ANTENNA

Figure D

MOTOROLA PART NO.	SYM-BOL	DESCRIPTION
1-83164H01	1	Ant. Rod
43-83163H01	1	Ball, Ant. Rod
3-84133A01	2	Set Screw
1-83166H01	3	Lower Section
43-83707D01	4	Bushing Coil
4-84269A01	5	Lockwasher
1-80701B94	6	Matching Section
3-136688	7	0-80 Screw
41-83691D01	8	Spring Contact
49-83868G01	9	Contact Disc
42-83697D01	10	Retaining Ring
66-106513	11	Allen Wrench
43-83881B01	12	Locking Nut
42-83940B01	13	"O" Ring
1-83886B01	14	Bushing Assem.
14-83798C01	15	Cap Insulator RG58/AU
30-475378— Use PK-362	16	Coaxial Cable

Antenna Replacement Parts, Mobile

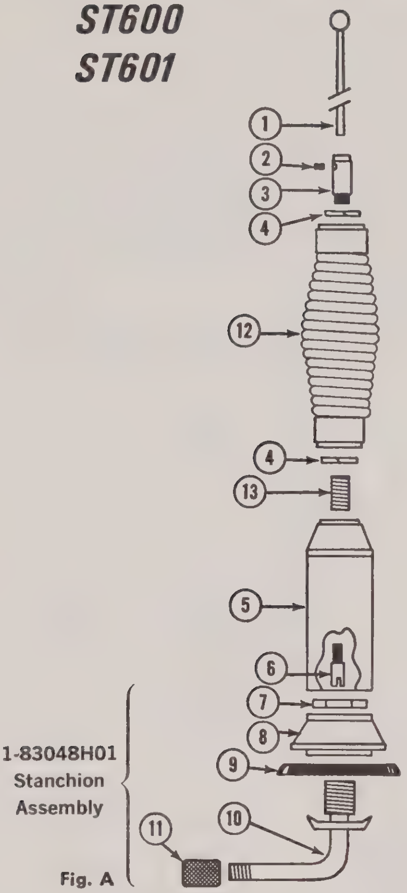


Fig. A

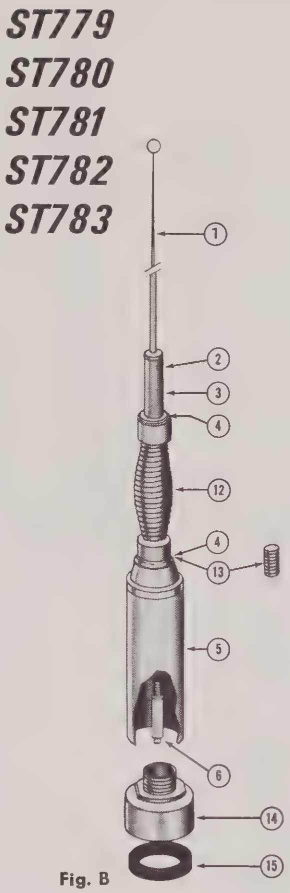


Fig. B

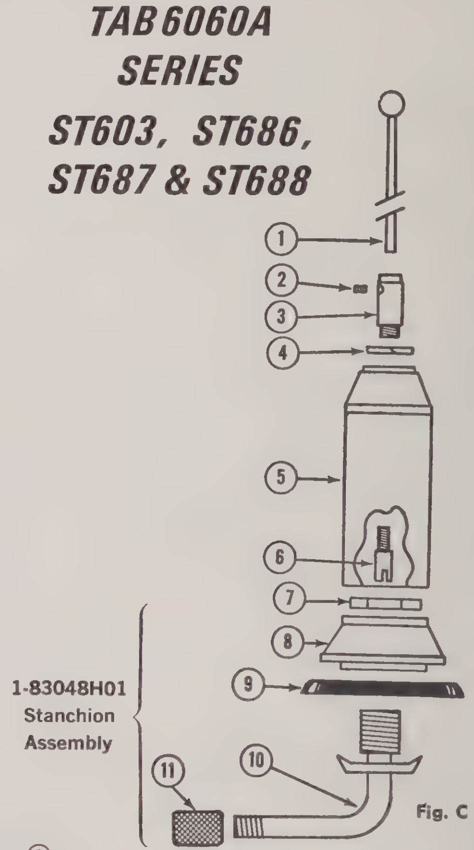


Fig. C

Antenna Replacement Parts List

MOTOROLA PART NO.	REF. SYMBOL	FIGURE	DESCRIPTION
47B83046H01	1	A, B, C, & D	Antenna Rod
47P83043H93	1	D	Upper Antenna Rod
3-7129	2	A, B, C, & D	Set Screw 10-32x⅛"
58P83042H86	3	A, B, C, & D	Antenna Rod Adaptor
4S9747	4	A, B, C, & D	Split Lockwasher "4" OD SST
24P83042H94	5	A, B	Loading Coil 130-174 MC
24P83042H93	5	B	Loading Coil 25, 28 MC
24P83042H90	5	B	Loading Coil 30-36 MC
24P83042H91	5	B	Loading Coil 36-42 MC
24P83042H92	5	B	Loading Coil 42-50 MC
24B83049H01	5	C	Loading Coil 25-28 MC
24B83049H02	5	C	Loading Coil 30-36 MC
24B83049H03	5	C	Loading Coil 36-42 MC
24B83049H04	5	C	Loading Coil 42-50 MC
24P83043H90	5	D	Transformer 450-470 MC
39P83043H46	6	A, C	Contact
39P83043H87	6	B, C	Spring Loaded Contact
1-83048H01 Stanchion assembly includes items 7-11			
2P83042H95	7	A, C	Nut ½"-20
43P83042H96	8	A, C	Dress Cap
32P83502G10	9	A, C	Rubber Pad
1P83043H42	10	A, C	Tube Assembly
42P83043H43	11	A, C	Cable Clamp
41P83043H92	12	A, B, C	Spring
46P83043H91	13	A, B, D	Stud
58P83043H89	14	B, D	Adaptor
32P83043H88	15	B, D	Gasket
3S7115	16	D	Set Screw (6-32x⅛" SST)
24P83043H94	17	D	Phasing Coil
47P83043H95	18	D	Tuning Rod

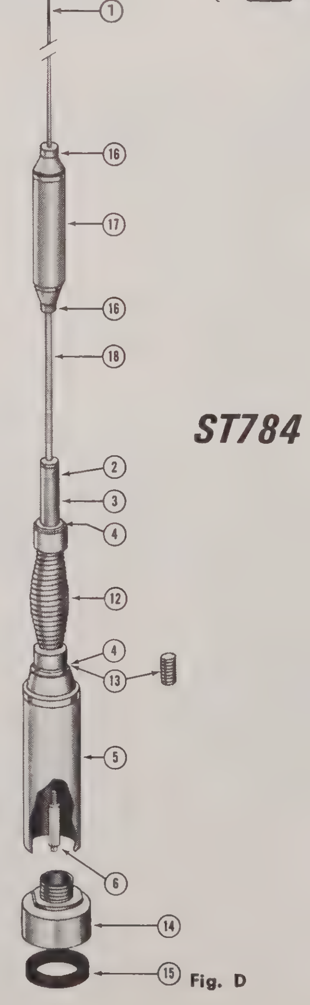
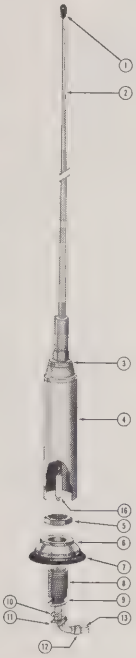


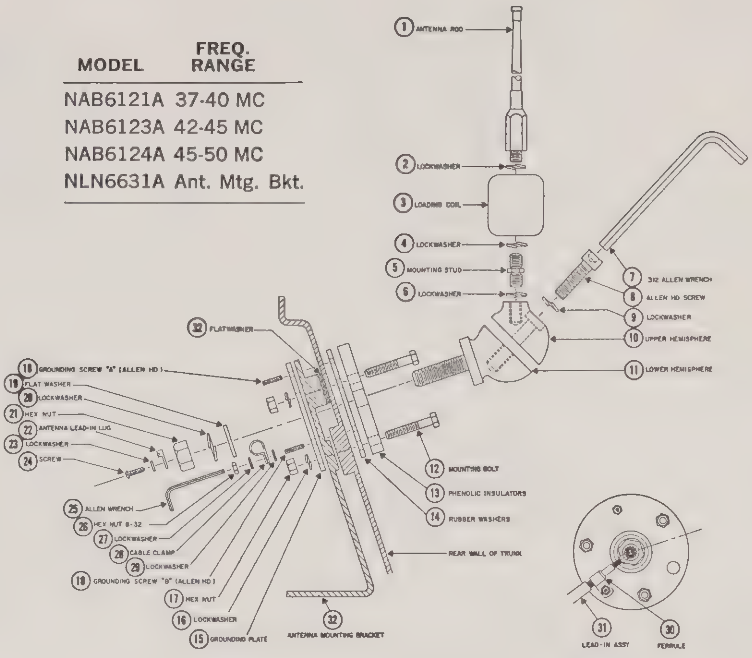
Fig. D

Antenna Replacement Parts, Motorcycle

MODEL	FREQ. RANGE
NAB6181A	29-33 MC
NAB6182A	33-36 MC
NAB6183A	36-42 MC
NAB6184A	42-50 MC
NAD6210B	150-174 MC



MODEL	FREQ. RANGE
NAB6121A	37-40 MC
NAB6123A	42-45 MC
NAB6124A	45-50 MC
NLN6631A	Ant. Mtg. Bkt.



Motorcycle Antenna Replacement Parts 29-50 MC and 150-174 MC, NAB 6181A Series, NAD 6210B (Safety Orange)

REFERENCE SYMBOL	PART NO.	DESCRIPTION
1	43P83502G14	Antenna Rod Tip (All models shown)
2	47P83502G01	Antenna Rod (All models shown)
3	4S9747	Lockwasher SST Split
4	24P83502G02	Loading Coil (29-33 MC)
	24P83502G03	Loading Coil (33-36 MC)
	24P83502G04	Loading Coil (36-42 MC)
	24P83502G05	Loading Coil (42-50 MC)
	24P83502G06	Loading Coil (150-174 MC)
5	2P83502G07	Special Nut
6	43P83502G08	Collar
7	32P83502G10	Gasket
8	58P83502G09	Antenna Adaptor
9	4-2640	Lockwasher (Internal) Replaces 4-2635
10	4S2623	Lockwasher SST (Split)
11	2-83402G13	Nut
12	2P83502G11	Nut
13	30P83502G12	Coaxial Cable RG58 A/U
14	58K854020	Adaptor (not shown)
15	28A42310	Coaxial Connector (not shown)
16	39P83043H46	Contact
*	7C82595B01	Antenna Mounting Bracket for Solocycles only

*Not supplied with antennas

Antenna Mounting Bracket Kit for New Fiberglass Body Servi-Cars

The NLN6631A Antenna Mounting Bracket is used to mount a 37 to 50 MC antenna on 1967 and later Harley-Davidson "Servi-Car" three wheel motorcycles with fiberglass trunk compartments. The antenna mounting bracket gives additional rigidity to the fiberglass trunk and provides an r-f ground from the motorcycle frame to the antenna base.

MODEL NO.	DESCRIPTION
NLN6631A	Antenna Mounting Bracket Kit

Servi-Car Low Band Antenna Replacement Parts for NAB6121A, NAB6123A, NLN6631A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
1	47C82078D01	Ant Rod 47" 40-50 MC
1	47C82078D02	Ant Rod 50" 37-40 MC
2	4S7685	Lockwasher
3	1V80709A54	Loading Coil 37-42 MC
3	1V80709A57	Loading Coil 42-45 MC
3	1V80709A58	Loading Coil 45-50 MC
4	4S7685	Lockwasher
5	46A892924	Mounting Stud
6	4S7685	Lockwasher
7	66K85988	312 Allen Wrench
8	3K838902	Allen Hd. Screw
9	4S7685	Lockwasher
10	58K838903	Upper Hemisphere
11	58K838904	Lower Hemisphere
12	3S1845	Mounting Bolt
13	14K838905	Phenolic Insulators
14	4K838906	Rubber Washers
15	4K838907	Grounding Plate
16	4S119331	Lockwasher
17	2S2878	Hex Nut
18	3K838908	Grounding Screw "B" (Allen Hd.)
19	4K838909	Flat Washer
20	4S7694	Lockwasher
21	2K838910	Hex Nut
22	29R3017	Antenna Lead-In Lug
23	4S7657	Lockwasher
24	3S6996	Screw
25	66K21442	Allen Wrench
26	2S1355	Hex Nut 8-32
27	4S7657	Lockwasher
28	42B82594B01	Cable Clamp
29	4S7657	Lockwasher
30	5K119263	Ferrule
31	1V80709A56	Lead-in Assembly
32	7C83166G01	Antenna Mounting Bracket

Antenna Replacement Parts, Base Station

TAD 6070 SERIES
OMNI — DIRECTIONAL

TAD 6090 SERIES REPLACEMENT PARTS

Driven Elements

FREQUENCY	PART NUMBER
150-156 mc	47B 82736B13
156-162 mc	47B 82736B05
162-168 mc	47B 82736B15
168-174 mc	47B 82736B07

Reflector Tubing

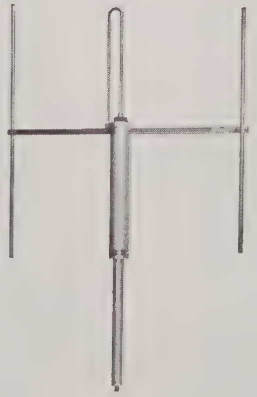
FREQUENCY	PART NUMBER
150-156 mc	47B 82316C09
156-162 mc	47B 82745B05—Orange
162-168 mc	47B 82745B15—Green
168-174 mc	47B 82745B07—Yellow

Transformer Assembly

FREQUENCY	PART NUMBER
150-156 mc	1B 82796C01
156-162 mc	1B 82796C02
162-168 mc	1B 82796C03
168-174 mc	1B 82796C04

Director & Reflector Mounting Brackets (2 Used)

FREQUENCY	PART NUMBER
150-162 mc	7D 82622C03
162-174 mc	7D 82622C05



TAD 6090 SERIES
UNI — DIRECTIONAL

TAD 6070 & TAD 6080 SERIES REPLACEMENT PARTS

Driven Elements

FREQUENCY	PART NUMBER
150-162 mc	47B 82736B05
162-174 mc	47B 82736B07

Reflector Tubing

FREQUENCY	PART NUMBER
150-162 mc	47B 82316C05 (TAD 6080 Series Only)
162-174 mc	47B 82316C07 (TAD 6080 Series Only)

Transformer Assembly

FREQUENCY	PART NUMBER
150-162 mc	1B 82741B03 (TAD 6070 Series)
150-162 mc	1B 82741B07 (TAD 6080 Series)
162-174 mc	1B 82741B04 (TAD 6070 Series)
162-174 mc	1B 82741B08 (TAD 6080 Series)

Reflector Mounting Brackets (2 Used)

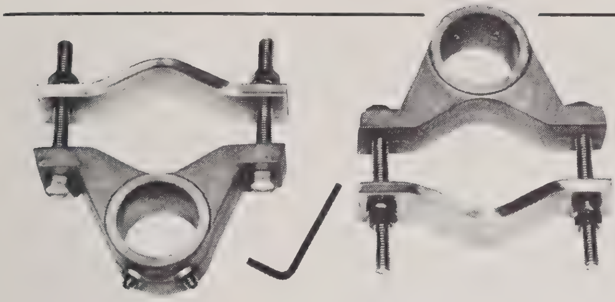
FREQUENCY	PART NUMBER
150-162 mc	7C 82314C03 (TAD 6080 Series Only)
162-174 mc	7C 82314C05 (TAD 6080 Series Only)

TAD 6080 SERIES
CARDIOID

COMMON PARTS FOR TAD 6070, 80 & 90 SERIES ANTENNAS

PART NUMBER	DESCRIPTION
14C 82943B01	Hub Insulator
32A 475396	Gasket
42C 82737B01	Clamping Ring
42A 85708	Compressor Ring
43C 82738B01	Hub
15C 82313C01	Plastic Cap
47B 82744B01	Mounting Pipe
1B 82748B01	Coaxial Connector Assembly
3S 131779	Allen Set Screw ¼"-20 x ¼" SST
3S 132148	Allen Cap Screw 10-32 x ½" SST
3S 125496	Machine Screw 8-32 x 1" SST
4A 9746	Lockwasher, Split #8 SST
3B 82739B02	Allen Cap Screw 5/16"-18 x ⅜" SST
2S 1359	Hex Nut 10-32 SST
3S 114985	Machine Screw 10-32 x ⅞" SST
2-844417	Stop Nut 10-32 SST
66K 108154	Allen Wrench
4S 400368	Lockwasher, Split #10 SST

Base Station Antenna Accessories



ANTENNA MOUNTING CLAMP KITS

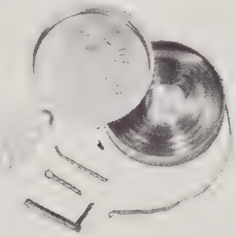
The TLN6685A Antenna Mounting Kit may be used for mounting any lightweight antenna having a 1″ to 3½″ O.D. support staff.

The kit is made of aluminum alloy with stainless steel hardware to prevent rust and corrosion. "Allen" head set-screws secure the antenna mast in the mounting kit sleeve. Two clamps hold the kit to a mounting surface. Stainless steel bolts, nuts and lockwashers are used to mount the clamps.

Extremely versatile, it can be mounted to a pipe, angle iron, flat on wall or to flat channel members of a tower.

TLN6685A Antenna Mounting Kit

TK458 WRAPLOCK UNIT



Contains 100 ft. of stainless steel banding, a quantity of connectors and a ratchet tool. Used to strap antenna masts to pipes, towers, poles, etc. Packaged in a dispenser type can for fast installation.

KIT NO.	APPLICATION
K8269	TU309 and TU310 Series Ant to 2½″ O.D. pipe
DS9629	DS9682 and DS9683, 84, 92, 94 Series Ant, to 2″ pipe
42-823572	TU311A Series Ant to ¾″ to 3½″ pipe. Replaces TK-459
TDN-6017B	For TDB-6030, TDC-6060, TDD-6010, -6070, -6080, -6090, -6100, TDE-6040, -6050, -6080 series Ant. to 1″ to 2¾″ pipe.
TDN-6020A	For TDD-6020A series Ant. to 1⅔″ pipe.
TDN6026A	Side Mount Kit for TDD6010 and 6030A Antennas
TDN-6071A	For TDF-6020, 30, 40, 50 2″ to 3½″ pipe
TDN-6074A	For TDE-6060, 70 Series 1¼″ to 3″ pipe
TDN-6075A	For TDB-6070A series and TDC-6020A Ant. to 1″ to 3½″ pipe.
TLN-6685A	For TAD-1000, -1010, -1020 series Ant. to 1″ to 3½″ pipe.
	Side Mount Kits
TDN-6056A	For TDD-6070, -6080, -6090, -6100, TDE-6040, -6050 series Ant. 6″-36″ adjustable spacing from tower.
TDN-6073A	For TDE-6060, -6070, -6080 series Ant. 6″-36″ adjustable spacing from tower.
MOT-SAE3	For TDE-6030, -6040, -6050, -6060, -6070, -6080, -6090 series Ant. 36″ fixed spacing from tower.
MOT-SAE6	Same as above except 61″-72″ adjustable spacing from tower.

TRANSMISSION LINE

TK-173 (RG8/U) Line Kits

Consists of RG8/U cable terminated in PL259 connectors. Supplied with a roll of Vinyl Tape and a ¼ oz. tube of Silicone grease to ensure a weatherproof installation. Sold in std. lengths of 25, 50, 75, 100, 125, 150, 175 or 200 ft. Always specify exact length in part number.

RG8/U Recommended Maximum Length

25-54 MHz	66-88 MHz	136-174 MHz	406-470 MHz	952-960 MHz
120 ft.	90 ft.	60 ft.	30 ft.	Not Recommended

Attenuation per 100 feet in dB

40 MHz—1.12 150 MHz—2.5 450 MHz—5.0

PK-526, RG8/U Cable Fittings Only

The PK-526 coaxial cable fitting kit provides the parts required for weatherproof UHF male connector terminations of RG8/U solid dielectric coaxial cable for interconnecting antennas and stations. Kit consists of two PL259 male UHF connectors, a ¼-ounce (7 gram) tube of silicone grease (Dow Corning #4), a 25-foot (7.6-meters) roll of ¾-inch (19mm) vinyl tape, and installation instructions.

TK-173 (RG8/U) Line Kits Ordering Information

NUMBER	LENGTH	NUMBER	LENGTH
TK 173025	25 ft.	TK 173100	100 ft.
TK 173050	50 ft.	TK 173150	150 ft.
TK 173075	75 ft.	TK 173200	200 ft.

*Lengths over 200 feet are available upon special order.

RG9/U and RG142/Coaxial Cable

PK-609 50 ft. RG9/U
PK-610 50 ft. RG142B/U

ANTENNA CROSS REFERENCE CHART

MFGR. NO.	MODEL NO.	MFGR. NO.	MODEL NO.	MFGR. NO.	MODEL NO.	MFGR. NO.	MODEL NO.
ASPS177	ST-600	ASPA544	ST-967	ASPA555	ST-897	Larsen NMO-30	ST-847
ASPR205	ST-602	ASPB544	ST-968	ASPB555	ST-898	Larsen NMO-34	ST-848
ASPS205	ST-699	ASPC544	ST-965	ASPC555	ST-895	Larsen NMO-40	ST-849
ASPS206	ST-601	ASP-552	ST-780	ASP-556	ST-899	Larsen NMO-150	ST-850
ASP-443	ST-603	ASPA552	ST-781	ASP-557	ST-901	Larsen NMO-450	ST-1094
ASPA443	ST-686	ASPB552	ST-782	ASP-558	ST-900	P-D 377-509	TLE-6211A
ASPB443	ST-687	ASPB552	ST-779	ASPS583	ST-601	P-D 377-509	TLE-6212A
ASPC443	ST-688	ASP-554	ST-784	ASPS585	ST-783	P-D 379-509	TLE-6111A
ASP-543	ST-969	ASP-555	ST-896	ASP-627	ST-970	PED 379-509	TLE-6112A
ASP-544	ST-966					Motorola	TLE-6152A

Jacketed Heliax Transmission Line Kits

Recommended Maximum Cable Lengths

CABLE TYPE	25-54 MHz	66-88 MHz	136-174 MHz	406-470 MHz	952-960 MHz
½″ Foam Heliax	270′	210′	150′	70′	50′
⅞″ Foam Heliax	500′	400′	270′	130′	80′
⅞″ Air Heliax	620′	500′	370′	200′	120′

Attenuation per 100 Feet in db.

CABLE TYPE	40 MHz	150 MHz	450 MHz
½″ Foam Heliax	.48	1.0	1.95
⅞″ Foam Heliax	.28	.6	1.2
⅞″ Air Heliax	.25	.5	.88

SUPPLIED IN COMPLETE INSTALLATION KITS — Jacketed Foam Heliax Transmission Line is provided in two sizes, ½″ and ⅞″, as part of four complete line kits. Two kits are for use with antennas with UHF Female terminations, two for antennas with N Male terminations.

LOW LOSS—Both foam heliax and air heliax use high conductivity copper for the center conductor and the outer jacket. Low-loss foam polyethylene is used as a dielectric or insulating material. The result is less attenuation through ohmic and dielectric losses.

CORROSION RESISTANCE—Jacketing and Copper, one of the most corrosion resistant of the common metals, are used for Motorola transmission lines because of their superior weathering characteristics.

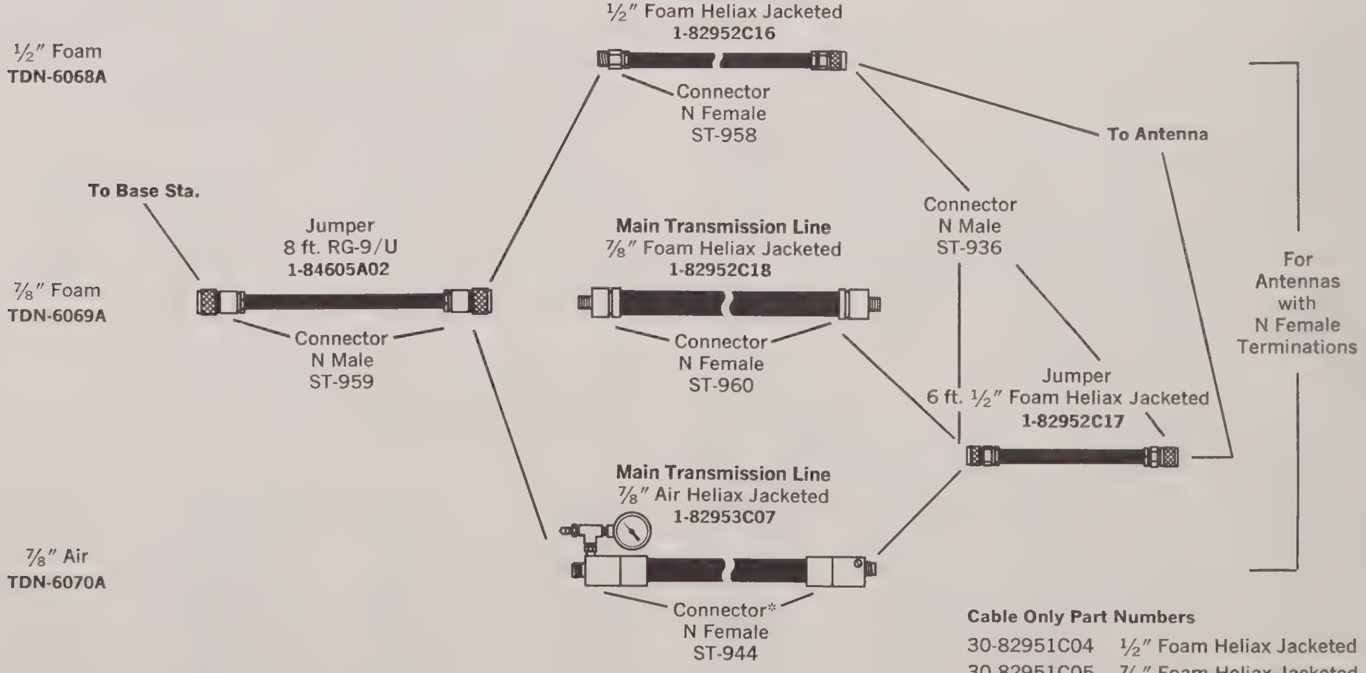
FLEXIBILITY—Because of its jacketed and corrugated construction it can be curved around building configurations, tower elements and other obstructions and can be pulled through conduits. Since it is flexible it can be taken down and moved to a new location if necessary.

Recommended Line Kits vs. Frequency

CABLE TYPE	25-174 MHz	406-470 MHz	952-960 MHz	IMTS
½ Inch Foam	TDN6062A	TDN6065A	TDN6068A	TDN6068A
⅞ Inch Foam	TDN6063A	TDN6066A	TDN6069A	TDN6069A
⅞ Inch Air	TDN6061A	TDN6067A	TDN6070A	Not Applicable
Base Connector	UHF Male	UHF Male	Type N Male	Type N Male
Ant Connector	UHF Male	Type N Male	Type N Male	Type N Male

The transmission line shown above is available only in multiples of 10 feet. Kits include jumper cables for tying the transmission line to the base station and antenna. 25-174 MHz and 406-470 MHz kits contain 8 feet of RG-8/U for base station tie-in, 952-960 MHz and IMTS kits contain 8 feet of RG-9/U for base station tie-in. ⅞″ transmission line kits contain 6 feet of ½″ foam line for antenna tie-in. ½″ foam transmission lines do not include jumper cables to the antenna. Kits also include binding material, silicone grease, vinyl tape and base station jumper mounting hardware. Connectors are attached to line at factory unless otherwise specified. Standard tools can be used to complete the installation.

952-960MHz and IMTS†



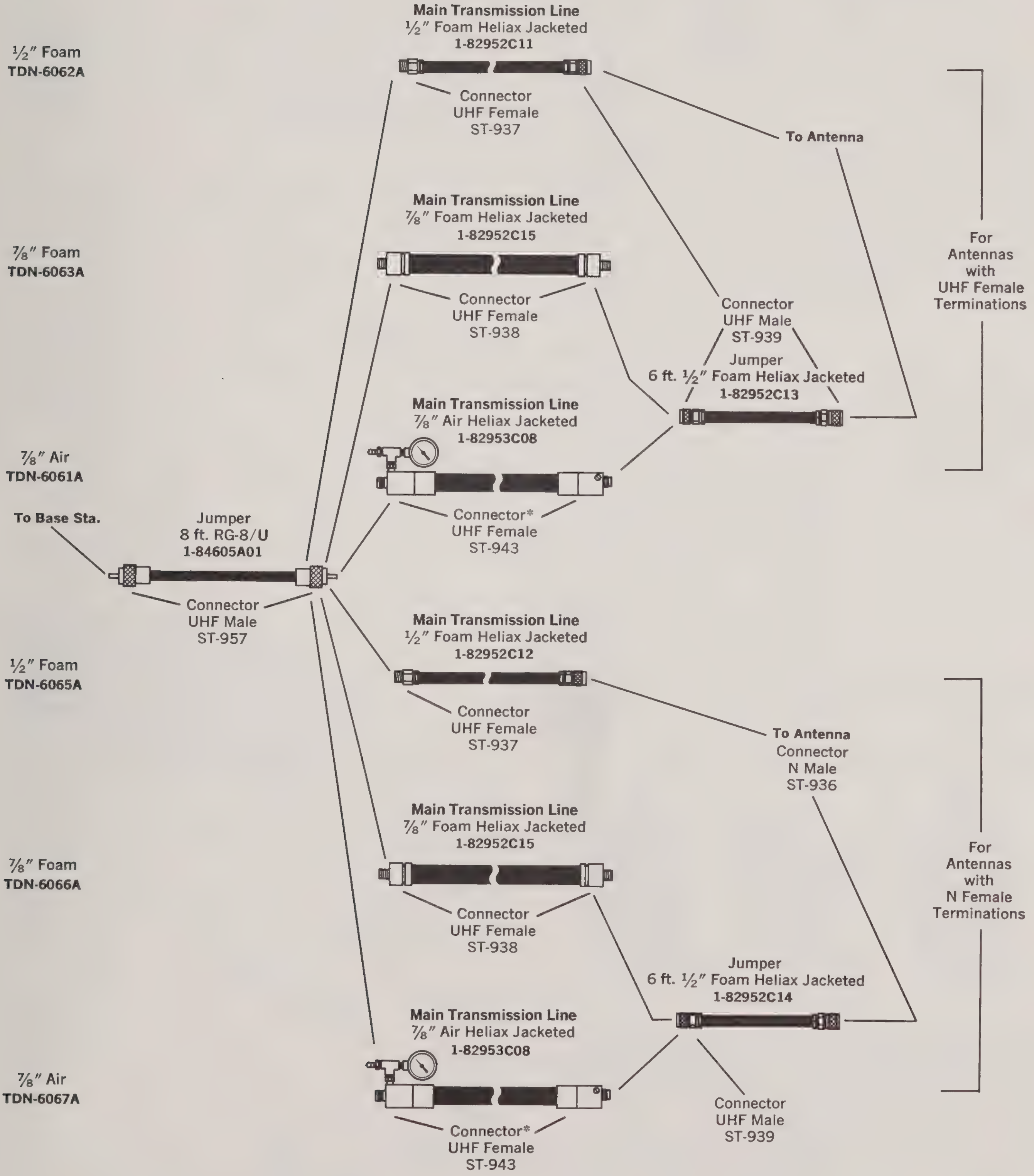
Cable Only Part Numbers

30-82951C04	½″ Foam Heliax Jacketed
30-82951C05	⅞″ Foam Heliax Jacketed
30-82954C02	⅞″ Air Heliax Jacketed
30-84604A01	RG9/U

* ST-945 Valve and gauge assembly not included.

†Improved Mobile Telephone Service

25-174MHz and 406-470MHz

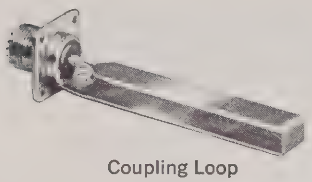


Cable Only Part Numbers

30-82951C04	½″ Foam Heliax Jacketed
30-82951C05	⅞″ Foam Heliax Jacketed
30-82954C02	⅞″ Air Heliax Jacketed
30-82345	RG-8/U

* ST-945 Valve and gauge assembly not included.

Cavity Resonators, Filters


Coupling Loop
0.5 db

TU 312

TU 313

PRECISION SELECTOR CAVITY RESONATORS

Because of system considerations, it is always advisable to contact your Motorola Radio Communications Representative when ordering these units. He will be happy to supply you with further information and assist you in integrating these units into your radio system. Coupling loops may be ordered directly from your local parts depot.

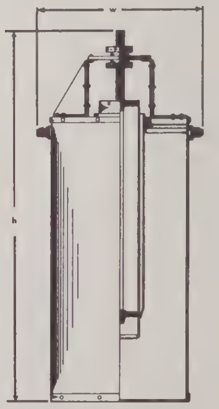
For minimizing interference in 30-50, and 132-174 MHz ranges. Cavity resonators minimize mutual interference when transmitters and receivers operating on different frequencies are connected to the same or separate antennas in the same vicinity. These multi-purpose, temperature-compensated RF filters are incorporated in the base station antenna circuits.

They reject unwanted received signals to minimize receiver desensitization and intermodulation, and attenuate unwanted emissions of spurious and harmonic signals from the transmitter output.

Choice of selectivity in all frequency ranges permits optimum performance in each specific application. Only a new coupling loop is needed to change selectivity characteristics. Matched impedance assures low voltage standing wave ratio—50 ohms input and ouput impedance.

	ELECTRICAL					MECHANICAL		
MODEL	Frequency MHz	Coupling Loop Kit	Insertion Loss—db	Loaded "Q"	Power—Watts	Height	Width	Weight
TU313L & M	30—40	TLB6432A	0.5	600	300*	78 inches	12 inches	63 lbs.
		TLB6431A	2.0	1200	50			
TU313H	40—50	TLB6434A	0.5	700	300*			
		TLB6433A	2.0	1400	50			
TU312H	132—174	TLD6592A	0.5	650	300	32 inches	12 inches	33 lbs.
		TLD6593A	1.0	1250	120			
		TLD6594A	1.5	1750	70			
		TLD6595A	2.0	2100	70			
		TLD6596A	3.0	3100	50			

*For input power greater than 120 watts, special tuning procedure must be followed.


TYPICAL CAVITY
CUT AWAY VIEW

CAVITY FILTERS 406-512 MHz

(A)

(B)

(C)

The T-1500A (Fig. A) is a highly selective bandpass type cavity filter. A single pair of adjustable coupling loops provides the right selectivity for your particular requirement. Different selectivity characteristics can be chosen simply by rotating the loops in the cavity.

T-1500A

INSERTION LOSS	0.5 db	1.0 db	2.5 db
LOADED Q	350	725	1750
MAXIMUM POWER INPUT	250 W	125 W	60 W
TEMPERATURE RANGE	−30°C to +60°C		
SIZE	12″ x 4½″ x 5″		
TERMINATION	UHF FEMALE		

The T-1501AL (Fig. B) and T-1501AH (Fig. C) use the Motorola exclusive reject notch feature to provide additional protection at specific frequencies. In addition to performing as high "Q" bandpass filters, these bandpass-with-reject cavity filters have an adjustable frequency reject notch which can be tuned to any specific frequency within 2MHz of the resonant frequency. The db attenuation at the reject frequency is over twice that available from a bandpass cavity filter. The T-1501AL has the reject notch at a frequency below the resonant frequency; the T-1501AH has the reject notch above the resonant frequency.

T-1501AL, AH

Frequency Band	406-430 MHz	430-470 MHz	470-512 MHz
Insertion Loss	0.7 dB	0.6 dB	0.5 dB
Loaded Q	350		
Maximum Power Input	250 Watts		
Minimum Pass-Reject Separation	2 MHz	2 MHz	3 MHz
Minimum Reject Attenuation	37 dB @ 2 MHz 52 dB @ 5 MHz	37 dB @ 2 MHz 52 dB @ 5 MHz	40 dB @ 3 MHz 48 dB @ 5 MHz
Temperature Range	−30° C to +60°C		
Size	12″ x 4½″ x 5″		
Termination	UHF Female		

BANDPASS WITH REJECT DUAL CAVITY FILTER 406-512 MHz

Because of system considerations, contact your Motorola Communications Representative when ordering units on this page.

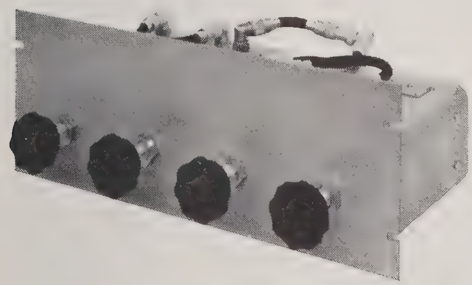
The T-1502A uses two Motorola exclusive bandpass-with-reject cavities to provide extremely high selectivity at frequencies close to the resonant frequency, with minimal insertion loss. Two adjustable frequency reject notches give additional protection from any two powerful interfering signals within ±2MHz of the resonant frequency.

Frequency Band	406-430 MHz	430-470 MHz	470-512 MHz
Insertion Loss	1.5 dB	1.3 dB	1.2 dB
Loaded Q	350	350	350
Maximum Power Input	250 W	250 W	250 W
Minimum Pass-Reject Separation	±2 MHz	±2 MHz	±3 MHz
Minimum Reject Attenuation	50 dB @ 2 MHz 72 dB @ 5 MHz	50 dB @ 2 MHz 72 dB @ 5 MHz	54 dB @ 3 MHz 67 dB @ 5 MHz
Temperature Range		−30°C to +60°C	
Size		7″ x 19″ x 12″	
Termination		UHF Female	
Cable Kit	TKN-6535A	TKN-6536A	TKN-6537A

BASE STATION DUPLEXERS BANDPASS WITH REJECT

406-512 MHz
250 Watts Power Input

- BANDPASS WITH REJECT *for maximum protection*
- MINIMUM INSERTION LOSS *for optimum system performance*
- 19″ PANEL MOUNTING *for simple installation*
- FACTORY TUNED* *for immediate installation*
- FIELD RETUNABLE *if you change frequencies*



T-1504A, AF Two-Cavity Duplexer

*Specify Frequency

MAXIMUM INTERFERENCE PROTECTION—In addition to providing 55dB (T-1503A) to 80dB (T-1504A) of protection from your own transmitter's noise and carrier, you receive the additional benefit of *reduced intermodulation interference and receiver desensing.* Because this duplexer is built in a *bandpass* configuration, your transmitter is protected from the carrier frequencies of neighboring transmitters, thus producing fewer intermod products. In addition, your receiver is protected from transmitter noise and carrier frequencies of neighboring transmitters and from the intermod products of your own transmitter.

Model Number	**T1505A**	**T1506A**
Insertion Loss	1.0 - 5.0 dB	1.5 - 7.5 dB
Size (H x W x D)	5¼″ x 19″ x 12″	7″ x 19″ x 12″
Power Input	250 watts - 60 watts (depending on insertion loss)	
Temperature Range	−30°C to +60°C	
Termination	UHF Female	

CABLE KITS

	406-430 MHz	**430-470 MHz**	**470-512 MHz**
MODEL T1503A	TKN-6538A	TKN-6539A	TKN-6540A
MODEL T1504A	TKN-6541A	TKN-6542A	TKN-6543A
MODEL T1507A	TKN-6549A	TKN-6550A	TKN-6551A
MODELS T1505A & T1506A	TKN-6544A	TKN-6545A	TKN-6546A

Model No.	**T1503A, AF†**		**T1504A, AF†**			**T1507A**
Frequency Band	**406-430 MHz**	**430-470 MHz**	**406-430 MHz**	**430-470 MHz**	**470-512 MHz**	**406-470 MHz**
Minimum Frequency Separation	5 MHz		2 MHz		3 MHz	5 MHz
Receiver Isolation at Transmit Frequency	55 dB		80 dB		85 dB	55 dB
Transmitter Noise Suppression at Receive Frequency	55 dB		80 dB		85 dB	55 dB
Minimum Transmitter Receiver Isolation	45 dB		60 dB		70 dB	55 dB
Receiver Insertion Loss	0.8 dB	0.7 dB	1.6 dB	1.4 dB	1.3 dB	2.0 dB
Transmitter Insertion Loss	0.8 dB	0.7 dB	1.6 dB	1.4 dB	1.3 dB	2.0 dB
VSWR Maximum	1.5: 1		1.5: 1			1.5: 1
Maximum Power Input	250 W		250 W			250 W
Temperature Range	−30°C to +60°C		−30°C to +60°C			−30°C to +60°C
Size	7″ x 19″ x 12″		7″ x 19″ x 12″			7″ x 19″ x 12″
Termination	UHF Female		UHF Female			UHF Female

†NOTE: AF, means factory installed. *Specify frequency.

Lightning Protection . . . Make sure your base station is fully protected

Important Facts You Should know About Lightning

1. **Lightning can deliver voltages of up to 1,000,000 or even more to any object that it hits.**
2. **Amperage can range from 1000 to 200,000.**
3. **There are an average of 40 electrical storms per year in any given part of the U.S. (See Fig. 1 for frequency in your area.)**
4. **40 to 60 strokes of lightning bombard every square mile of the U.S. every year.**
5. **Any object which projects appreciably higher above the ground than other objects nearby is much more vulnerable to being struck by lightning. (See Fig. 2 for specifics.)**

INCIDENCE OF THUNDER STORMS IN THE U.S.

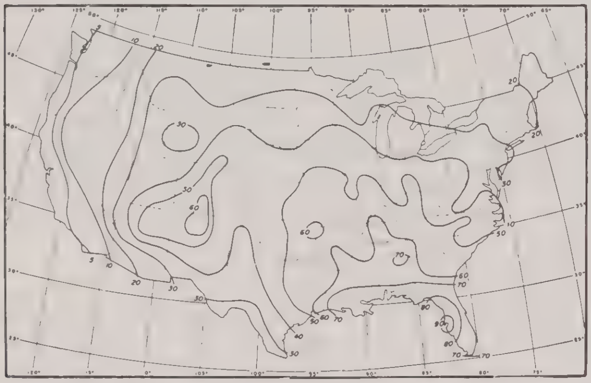
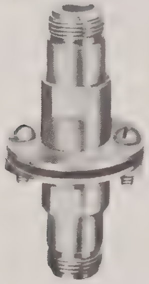


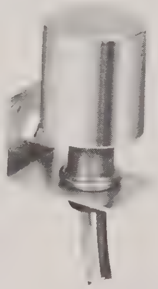
Fig. 1. US Weather Bureau's Map of the United States, with zone-lines showing number of days per year having thunder storms. Locations between lines can be interpolated—for example, if you live in Hartford, Conn. you have about 25 thunderstorm days per year; Philadelphia, Pa., 35; Kansas City, Mo., 55; Dallas, Texas, 52; etc.

Fig. 2

Height of Object in feet	Probability of Being Struck by Lightning in an area having 30 storms per year
50	Once every 4 years
100	Once every 2½ years
200	Once every 1½ years
400	3 times every 2 years
600	3 times per year
800	5 times per year
1000	10 times per year
1200	20 times per year
1500	40 times per year

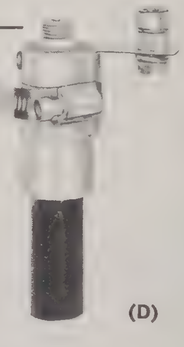


(A)



(B)

(C)



(D)

LIGHTNING ARRESTORS (A)

Lightning arrestors minimize lightning risk to costly two-way equipment such as receiver front ends and transmitter final amplifiers and harmonic filters. When inserted at a critical point in an antenna system, these easily installed lightning arrestors will provide added protection to your equipment and personnel.

ST786 "UHF" type
ST787 "N" type

AC LINE SURGE PROTECTOR (B)

The TLN-4399A ac line surge protector is recommended in areas where lightning, static discharge, or other line surges are encountered. The unit features a hermetically sealed, pre-ionized spark gap and will bypass repeated overvoltages without significant change in breakdown level or insulation resistance. Typical breakdown voltage is 1500V when subjected to a voltage rising at 10kv/sec. Units will withstand repeated current surges of 10 kiloamperes for 200 microseconds. Weatherproof construction permits mounting indoors or outdoors in a standard ½-14 conduit hole or using the mounting bracket supplied. Unit connects directly across the 117 VAC line.

TLN-4399A Surge Protector

CONTROL LINE PROTECTOR (C)

The 80-83029H02 and 80-83029H04 discharge gap (sealed-in gas type) surge protectors are designed for connection to the control lines used with base station equipment. Units have a discharge voltage of 230V dc and 350V dc respectively and can withstand 5 kiloampere peaks of 120 microseconds duration. Miniature construction permits unit to be mounted easily on line terminals. Two are required for each pair of lines and connect from each line to ground.

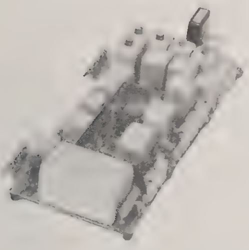
80-83029H02 Control Line Spark Gap, 230V dc
80-83029H04 Control Line Spark Gap, 350V dc

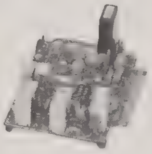
GROUNDING CLAMP KITS (D)

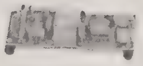
Grounding clamp kits are a necessity on two-way communications installations where there may be a risk to equipment or personnel from shock or lightning. The clamps are made to fasten to ½″ or ⅞″ heliax cable, and to pipe or grounding rod. The installation for jacketed cable is the same as for unjacketed cable except that the cable clamp is fastened to a cable connector rather than to the body of the cable. Clamps are constructed of stainless steel. PK-382 cable (conductor size #6) suggested for grounding.

PK-382 Grounding Cable 100-ft. box 30-825602 cond. size No. 6.
ST-788—For ½″ jacketed heliax and pipe or grounding rod.
ST-853—Same as above except for ⅞″ jacketed heliax.
ST-789—For ½″ unjacketed heliax includes brass bushings for better electrical contact without collapsing line
ST-790—Same as above except for ⅞″ unjacketed heliax.

"Micor" and Base Station Modules







REPLACEMENT/SPARE PLUG-IN BOARDS FOR "MICOR" RADIO

Low Band 25-50MHz "Micor" Radio Boards

MOTOROLA KIT	DESCRIPTION
TLB-6831A	Transmitter Exciter (25-30MHz)
TLB-6832A	Transmitter Exciter (30-36 MHz)
TLB-6833A	Transmitter Exciter (36-42MHz)
TLB-6834A	Transmitter Exciter (42-50MHz)
TLB-6841A	Transmitter Power Control (25-30MHz)
TLB-6842A	Transmitter Power Control (30-36MHz)
TLB-6843A	Transmitter Power Control (36-42MHz)
TLB-6844A	Transmitter Power Control (42-50MHz)
TLB-6851A	Receiver (25-30MHz)
TLB-6852A	Receiver (30-36MHz)
TLB-6853A	Receiver (36-42MHz
TLB-6854A	Receiver (42-50MHz)
TLB-6861A	Receiver with "Extender" (25-30MHz)
TLB-6862A	Receiver with "Extender" (30-36MHz)
TLB-6863A	Receiver with "Extender" (36-42MHz)
TLB-6864A	Receiver with "Extender" (42-50MHz)
TLN-4289A	Low Band Squelch & Audio

High Band 132-174MHz "Micor" Radio Boards

MOTOROLA KIT	DESCRIPTION
TLD-8261A	Transmitter Exciter (132-150.8MHz)
TLD-8262A	Transmitter Exciter (150.8-174MHz)
TLD-8290A	Transmitter Power Control (45 W)
TLD-8380A	Transmitter Power Control (60, 90 & 110W)
TLD-8271A	Receiver (132-142MHz)
TLD-8272A	Receiver (142-150.8MHz)
TLD-8273A	Receiver (150.8-162MHz)
TLD-8274A	Receiver (162-174MHz
TLN-4310A	High Band Squelch & Audio

Boards Common to Low Band and High Band "Micor" Radio

MOTOROLA KIT	DESCRIPTION
TLN-4292A	Multi-Frequency Control Board (Both Low & High Band Models)
TLN-4293B	"Private Line" Encoder (less reed)
TLN-4294B	"Private-Line" Decoder (less reed)

MOTOROLA KIT	DESCRIPTION
TLN-4290B	Receiver Audio Power Amp. (Both Low & High Band Models)
TLN-4291A	Single Frequency Control Board (Both Low & High Band Models)
TLN-4295A	Antenna Switch

TEK 38 BASE STATION MODULE SERVICE BOARD

Allows you to test and repair base station modules in the service shop, on the bench! Convenient multiple connector posts permit plug-in jumpering and strapping between any points on the service board.

In addition, the board contains two sets of ¾″ spaced receptacles for connecting a 12V power supply (TEK 23 or equivalent) and an audio oscillator. A kit of 20 assorted plug-in jumper leads (included in kit), consisting of regular jumpers plus resistor type jumpers, permit proper strapping and termination to simulate actual operation in the base station.

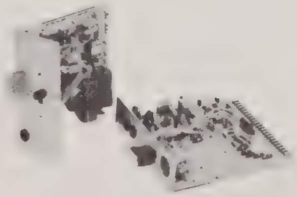
No service shop should be without one of these kits as it will pay for itself in time normally wasted in soldering and clipping in jumpers, etc.

TEK 38 Base Station Module Service Kit

TEKA-75 Patch Lead Kit for TEK-38, consists of 20, 6″ leads and storage container

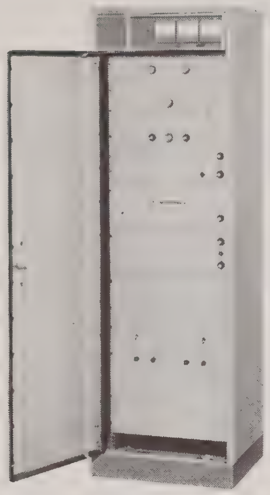
BASE STATION MODULES

MOTOROLA KIT	DESCRIPTION
TLN-1172A	Line driver module
TLN-1173A	Station logic module
TLN-1174A	DC transfer module (1 freq. carrier sq.)
TLN-1175A	DC transfer module (1 freq. "Private-Line")
TLN-1176A	DC transfer module (2 freq. "Private-Line")
TLN-1177A	Decoder module (4 tone)
TLN-1179A	Time out timer
TLN-1180A	Squelch gate module
TLN-1181A	Single tone decoder module
	FREQUENCY MUST BE SPECIFIED Std. frequencies: 1500, 1650, 1800, 1950, 2400Hz
TLN-1183A	Master decoder module
TLN-1230A	Meter module (carrier squelch)
TLN-1231A	Meter module (Private-Line)
TLN-1243A	Decoder module (F1)
TLN-1244A	Decoder module (F1 and P.L.)
TLN-1245A	Guard tone decoder module
TLN-1246A	Decoder module (F2)
TLN-1247A	Mute control module (F2, R2)



MOTOROLA KIT	DESCRIPTION
TLN-1248A	Control module (C2, R2)
TLN-1249A	Squelch control module
TLN-1250A	Repeater control module
TLN-1251A	Control module ("Private-Line")
TLN-1252A	Control module ("Wild-Card")
TLN-1253A	Control module (Paging)
TLN-1254A	Guard tone detector (Repeater)

Base Station Parts List



BASE STATION REPLACEMENT PARTS

(Upright Models Indoor and Outdoor)

PART NUMBER	DESCRIPTION
72D 82609H03	Meter, 0-360 watts
72D 82609H02	Meter, 0-120 watts
72-84864B01	Meter, 50 ua & 250 volts. Replaces 72-82609H01
72D 82610H01	Meter, 300 ma & 500 volts
72D 82610H02	Meter, 600 ma scale
72D 82610H03	Meter, 3000 volt scale
65B 83099A02	Fuse, plug 8 amp
65B 83099A04	Fuse, plug 20 amp
33A 82276H01	Nameplate
33B 82830H01	Nameplate, "Motorola"
40B 83846A01	Switch, interlock
7B 82839H01	Bracket, swt. mtg. (Indoor)
7B 83845A01	Bracket, swt. mtg. (Outdoor)
64B 83857B01	Plate, mic. mtg.
58B 83847A01	Bulkhead fitting
65B 82296H01	Pilot light, red
65B 82296H02	Pilot light, amber
42A 83112A01	Clip, pilot light
55D 82810H01	Handle, lock (Outdoor)
55K 837361	Key (CH-751)
55C 83674B01	Lock (Indoor)
55B 837339	Key (2553)
55B 82262H01	Handle (Indoor)
THN 6057A	Cabinet Kit, Indoor
THN 6058A	Cabinet Kit, Outdoor
TLN-6892A	Rain duct } used with THN-6058A
TLN-8149A	Air duct (back) } used with THN-6058A
TLN 8240A	Meter Panel Kit (Indoor) u/o B93LPB (High power station)
TLN 6864A	Meter Panel Kit (Outdoor) J63, J73LPB (Low power station)
TLN 6963A	Meter Panel Kit (Outdoor) J93LPB (High power station)
61C 83190C01	Glass Meter Panel (High Power)
61C 83191C01	Glass Meter Panel (Low Power)
7D 83153C01	Wrap-around Frame (For Glass Meter Panel)
7D 83153C03	Center Frame (For Glass Meter Panel)
7D 83153C05	Bottom Frame (For Glass Meter Panel)
13D 83155C01	Speaker Grille (Indoor Cabinet)
13B 82264H01	Speaker Grille (Outdoor Cabinet)
13D 83054C01	Meter Grille (Low Power)
13D 83054C03	Meter Grille (High Power)

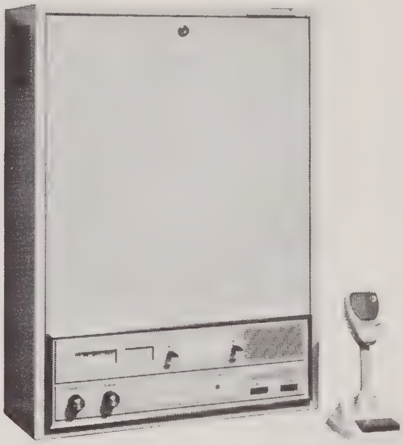
OUTDOOR
WEATHERPROOF
CABINET
THN-6058A

INDOOR
CABINET
THN-6057A

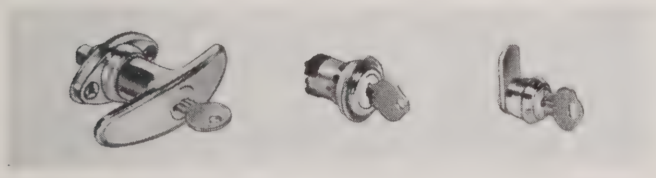
PART NUMBER	DESCRIPTION
41B 83154C01	Grille Spring
TLN 6866A	Blank Panel Kit 3½"
TLN 6868A	Blank Panel Kit 7"
TLN 6869A	Blank Panel Kit 8¾"
TLN 6870A	Blank Panel Kit 10½"
3S 135038	Panel MTG Screw #14
4K 812732	Cushion Washer
2C 82360B07	Speed Nut #14
1V 80738A57	Door and fastener assembly R.H. (High Power Low and High Band) final amplifier
1V 80740A22	Door and fastener assembly L.H. (High Power Low and High Band) final amplifier
36C 83579B01	Control Knobs for final amplifier (4 used)
36B 83578B01	Control Knobs for final amplifier (2 used)
36C 83069B01	Shaft lock nut for receiver panel
36B 82631H03	Control Knob for receiver panel
36B 83141D01	Door Knob for receiver panel
45B 83143D01	Cam Lock for receiver panel
43B 83147D01	Spacer for receiver panel
41-82651H01	Torque spring for receiver panel. Replaces 41-83142D01
4B 83146D01	Snugging washer for receiver panel
4A 82685H03	Special washer for receiver panel
36B 83538B01	Threaded knob for accessory kit panel
55B 83635B01	Latch for accessory kit panel
41B 83634B01	Detent spring for accessory kit panel
7D 82228H01	Heat sink for Low and High Band R.F. amplifiers

COMPA-STATION CONTROL PANEL REPLACEMENT PARTS

PART NUMBER	DESCRIPTION
15-83955A05	Use THN-6061A
15-83955A07	Use THN-6062A
15E83968A01	Housing (P.O. THN6063A)
64E83677D01	Frame and Front Panel
2A83599D01	Speed Nuts (For 7D83192B01)
55B83616B01	Lock & Two Keys (Lock #2221)
55K893872	Key #2135
13B83936A01	Meter Escutcheon
13B83935A01	Clock Escutcheon
15C83940A01	Blank Cover 6¼" x 2" (5 used)
15D83236C03	Blank Cover 2" x 1¼" (12 used)
15D83236C04	Squelch and Volume Cover 2" x 1¼" with ⅜" Mtg hole
15D83236C02	Toggle Switch Cover 2" x 1¼" with 19/32" mtg hole
15D83236C01	Telephone Switch Cover 2" x 1¼" with Slotted Hole
36B83938A01	Knob used on Telephone Switch with above Cover
33C83101B01	Label Kit (Complete Set)
36C82633H02	Control Knob
65B82296H02	Light Indicator (amber)
65B82296H01	Light Indicator (red)
61B82723D01	Clock Window
36C82630H01	Knob (For Metering Switch)
15C83950A01	Switch Cover (For Metering Switch)
THN6061A	Cabinet Kit (Local Control)
THN6062A	Cabinet Kit (Local Extended and Remote Control)
THN-6063A	Housing, Extender Local
TKN6276A	Extended Local Control Cable Kit 10 Ft.
TKN6277A	Extended Local Control Cable Kit 25 Ft.
TKN6278A	Extended Local Control Cable Kit 50 Ft.
TKN6279A	Extended Local Control Cable Kit 75 Ft.
TKN6280A	Extended Local Control Cable Kit 100 Ft.
TLN8371A	Wall Mounting Bracket Kit
15-83955A11	Front Local Control Door (P.O. THN6061A)
15P83151D48	Back Door (P.O. THN6061A & THN6062A)
15P83151D49	Front Extended Control Door (Louvred) (P.O. THN6062A)



Motorola Standard Locks and Keys



MODEL	MOTOROLA LOCK AND KEY #	MOTOROLA KEY # ONLY	MFG. KEY #
10" Mobile Housing	55K893871	55K893872	2135
15" Housing ("T-Power")	55B861050	55K890568	PA-235
(BY) Cabinet	55K893871	55K893872	2135
(BR) Cabinet--Front Door	55K837338	55K837339	2553
(BR) Cabinet—Rear Door	55K837337	55K837339	2553
(BR) Outdoor Cabinet	55K837360	55K837361	CH-751
"MOCOM•10"	55-84298C01	55-893872	2135
Motorcycle "Dispatcher" Mtg. Rack	55B851486	55K851487	6K11
"MOTRAC"	55A 852656	55K 893872	2135
Business "Dispatcher" and "MOCOM•30"	55A 82082D01	55K 893872	2135
New base station (Outdoor)	55D 82810H01	55K 837361	CH-751
New base station (Indoor)	55C 83674B01	55K 837339	2553

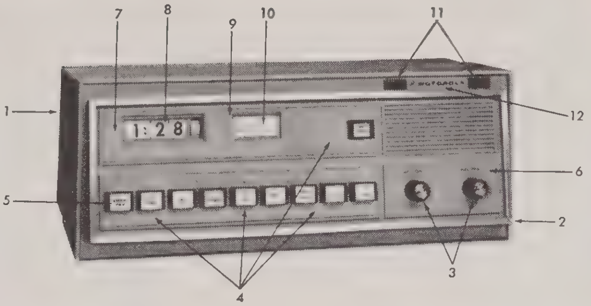
Note: complete lock installation kit available for those units without lock. order **TLN-4400A**

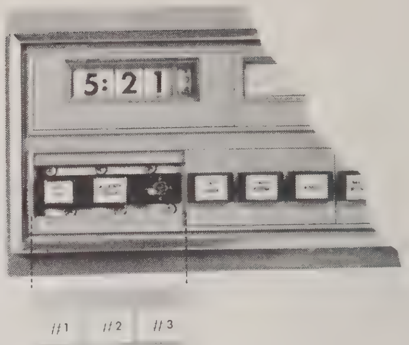
MODEL	MOTOROLA LOCK AND KEY #	MOTOROLA KEY # ONLY	MFG. KEY #
"MOCOM•70"	55-84912A01 (barrel) 55-84530B01 (nylon lock bolt) 45-84904A01 (cam bar)	55-893872	2135
"Micor"	55-84101B01	55-893872	2135
"MOCOM•35"	55-84237C01	55-893872	2135
IMTS Control Head (450)	40-83987H01	55-8200H02	2252
IMTS Control Head (150)	40-83471A07	55-8200H02	2252
MTS Control Head (150)	40-82256G01	55-8200H01	H2141
RCC Control Head (Secode)	55-83114H46	55-83114H47	
Transistorized "Compa-Station"	55K893871	55K893872	2135
Solid-state "Compa Station"	55-83616B01	55-893872	2135
Transistorized Consolette	55-83660E02	55-893872	2135
Solid-state Consolette	55-83660E01	55-893872	2135

ELECTRICAL SWITCH LOCKS AND KEYS

Motorcycle —FMTRU —Series	40A475830	55K861206	DM-279
Motorcycle S-31 and 33 Series	40B849041		
FSTRU— 250—BR	40A86741	55K86743	—
R43GGV (TLN-6054A)	40B82220H01	55A82000H01	H2141

Remote Control Console Desk Sets Parts Listing



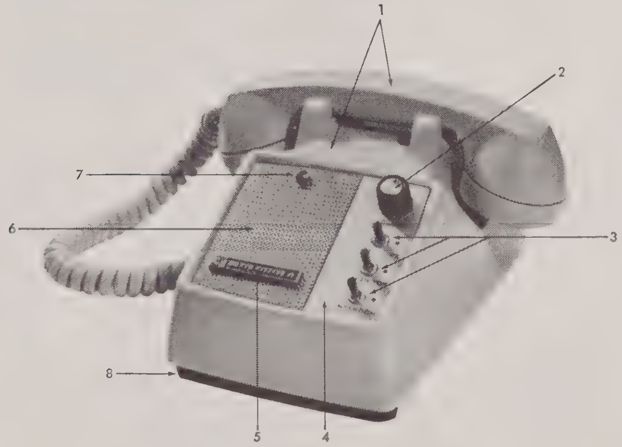


REF. SYMBOL	PART NUMBER	DESCRIPTION
1	15E83113G01	Housing
	5B83786C01	Rubber Feet
	3A82538E01	Screw, Special (Captive)
2	64E83123G01	Panel and Bezel
	7D83118G01	Front Frame
	2C83599D04	Nut, Speed
3	18D82915E04	Pot. (20 ohm) Volume
	40C83400G01	Switch, Rotary (Off-On)
	36B82629H02	Knobs
4	64C83071G01	Insert, Switch (Blank)
	64C83071G02	Insert, Switch (Opening #1)
	64C83071G03	Insert, Switch (Opening #2)
	64C83071G04	Insert, Switch (Opening #1, #2)
	64C83071G05	Insert, Switch (Opening #1, #3)
	64C83071G06	Insert, Switch (Opening #1, #2, #3)
	61A83440G01	Push Button Insert Assort. 1 ea. Blu, Grn, Red, Wht, & Yel.
5	54C83412G01	Labels, Switch (Assortment)
6	54C83327G01	Labels (Assortment—Off-On, Volume, etc.)
7	64C83074G02	Insert, Clock
	64-84217A01	Insert, Clock (Blank). Replaces 64-83074G01

REF. SYMBOL	PART NUMBER	DESCRIPTION
8	72C83433G01	Clock (12 Hr)
	72C82922B09	Clock (24 Hr)
	61B83072G01	Window, Clock
9	64C83073G02	Insert, Meter
	64C83073G01	Insert, Meter (Blank)
10	72C83270G01	Meter VU
11	65B83241G01	Jewel, Lite (Red)
	65B83241G02	Jewel, Lite (Grn)
	9B82778C01	Socket, Pilot Light
	15B83154G01	Cover, Light
	2C83599D02	Nut, Speed
12	33A83318G01	Nameplate (Motorola)

NON-REFERENCED ITEMS

PART NUMBER	DESCRIPTION
65K861828	Lamp (14V) #330 U/with Switches
65C82010C03	Bulb, Min. Bay. (14V) #756
65K475395	Fuse (½ Amp 3AG 125V)
50D82774C01	Speaker 3.2 ohm (3x5 PM)
1V80779A01	Assem. Shield Eyeleted (PA Board Terminals)
33B83751C01	Nameplate (Model)
30C83211C02	A.C. Cord & Plug

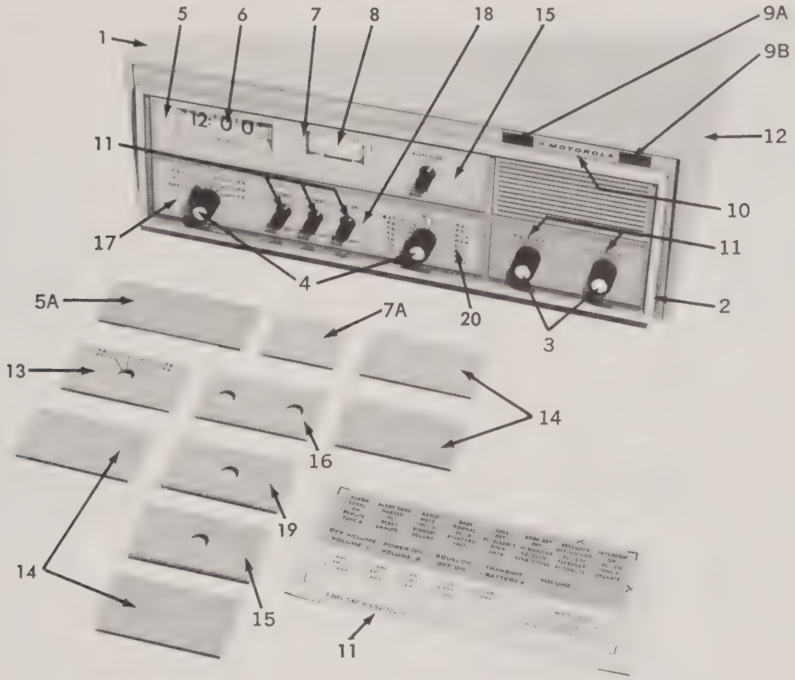


NON-REFERENCED ITEMS

59D83272G01	Cartridge
1V80779A83	Assem., Hang-Up Switch
30C83211C03	A. C. Cord & Plug
50D83205B03	Speaker
65K892098	Fusetron (3/16A-125V)
33B83675G01	Nameplate
TKN6323A	Batt. Cable U/W T1378A, 79A, & 80A
65S61688	Fuse (4 Amp-3AG)

REF. SYMBOL	PART NUMBER	DESCRIPTION
2	36C82628H03	Knob, Control
3	40D83334G01	Switch, Lever-Locking; Cont., 1 Form "C"
	40D83334G02	Switch, Lever-Cont., 1 Form "A", 2 Form "C"
	40D83334G03	Switch, Lever-Non-Locking; Cont., 1 Form "A", 1 Form "B", 1 Form "C"
	40D83334G04	Switch, Lever-Cont., 1 Form "A", 1 Form "C"
4	33B83336G01	Escutcheon U/W T1375A & T1378A
	33B83336G02	Escutcheon U/W T1376A & T1379A
	33B83336G03	Escutcheon U/W T1377A & T1380A
	33B83336G04	Escutcheon U/W T1370A
	33B83336G05	Escutcheon U/W T1371A
5	33C83488G07	Nameplate
	2A83599D03	Nut, Speed
6	64B83240G01	Plate, Grille
7	61A82720C01	Jewel, Pilot Light (Red)
	2A83599D01	Nut, Speed
	9B83621G01	Socket, Pilot Light
	26B83622G01	Shield, Lamp
	65C82010C03	Bulb (14V) #756
8	75B83620G01	Foot, Rubber

REF. 1	BLACK	RED	GREEN	BLUE	BEIGE	WHITE
Housing & Handset (Standard)	TLN-8680A	TLN-8681A	TLN-8682A	TLN-8683A	TLN-8684A	TLN-8685A
Housing & Handset (Tone models)	TLN-4093A	TLN-4094A	TLN-4090A	TLN-4091A	TLN-4095A	TLN-4092A
Handset Assy Only (Standard)	1V80704B52	1V80704B53	1V80704B54	1V80704B55	1V80704B56	1V80704B57
Handset Assy Only (Tone models)	1V80704B58	1V80704B59	1V80704B60	1V80704B61	1V80704B62	1V80704B63



REF. SYMBOL	PART NUMBER	DESCRIPTION
1	15-84922B01	Housing
	15-83150G01	Transistorized consolette*
	3-83307G01	Screw, thumb u/w housing
2	64-83123G01	Panel & bezel
	7-83118G01	Front frame
3	18-82528D01	Pot. Carbon w/switch (volume)
	18-82810C07	Transistorized consolette*
	18-82700D07	Pot. carbon (squelch)
	36-82629H02	Knob
4	36-82630H01	Knob (pointer)
5	64-84217A01	Panel insert (clock)
	64-83074G02	Transistorized consolette*
5A	64-83074G01	Panel insert (clock blank)
6	72-83433G01	Clock (12 hr.)
	72-82922B09	Clock (24 hr.)
	61-83072G01	Window (clock)
7	64-83071G02	Panel insert (VU meter)
	64-83073G02	Transistorized consolette*
7A	64-83073G01	Panel insert (VU meter blank)
8	72-83270G01	VU meter
	42-83155G01	Clip, meter
	26-83747G01	Shield, meter
9	65-82010C03	Lamp, min. bay. (14v) #756
	9-82778C01	Sockets, lamp
	2-83599D02	Nut, speed
	15-83154G01	Cover, light
9A	65-83241G01	Jewel, lite (red)
9B	65-83241G02	Jewel, lite (grn)
10	33-83318G01	Nameplate (Motorola)
11	54-83327G01	Labels for switches and controls (assortment)
12	1-80775A46	Assembly bottom cover w/bumpers
	75-864052	Recessed bumpers p/o bottom cover
	5-7747	Rivets (.187 dia x 5/16) u/w bumpers
13	64-83071G08	Panel insert, switch U/W TLN-8619A multi freq. kit
14	64-83071G01	Panel insert, switch (blank)
15	64-83071G07	Panel insert, switch U/W TLN-8664A Alert Tone or TLN-8622A private line kits
16	64-83071G13	Panel insert, switch 2 openings U/W TLN-8663A inter-comm only
17	64-83071G14	Panel insert, switch U/W TLN-8711A single tone, multi freq. kit

REF. SYMBOL	PART NUMBER	DESCRIPTION
18	64-83071G12	Panel insert, switch 3 openings U/W TLN-8663A inter-comm and private line kit
19	64-83071G16	Panel insert, switch U/W TLN-8721A tone squelch kit
20	64-83071G10	Panel insert, DC metering

NON-REFERENCED ITEMS

1V80776A49	Assem. Line Cord
50D82774C01	Speaker
55-83660E01	Lock W/Keys
55B83660E02	Transistorized Consolette*
55K893872	Keys
33B83675G01	Nameplate
13B813618	Label (Patent)
54A842366	Label (Replacement Parts)
54A850440	Label (F.C.C.)
36A82944A01	Knob, Volume P/O Inter-Comm Kit Used Internally
2S7019	Nut (4-40 x ¼ Hex)
2B82224B03	Nut, Elastic Stop (10-32)
2S1376	Nut (⅜-32x½ Hex)
2C83599D04	Nut, Speed U/W Front Panel
3S135049	Screw (10-32 x ⅜ Pln Hex in Lk)
3S129890	Lock Screw (10-32x⅜ Pln Hex)
3S134212	Tapping Screw (4-40x5/16 Phl Hex Ex Lk)
3S134184	Tapping Screw (4-40x5/16 Phl Hex In Lk)
3S115727	Lock Screw (10-32x½ Pln Hex)
3A82227A02	Screw, Special
3S136145	Machine Screw (10-32x½ Slt Hex Wshr)
3S134186	Screw (#6x5/16 Pln Hex)
3S3398	Screw (#6x⅜ Pln Hex)
3S488098	Tapping Screw (#8-18x⅜ Pln Hex)
4S1724	Washer, Flat (.234-⅝-.048)
4S1720	Washer, Flat (.156-⅜-.030)
4S7698	Washer (⅜ Int)
4C82418B86	Washer, Nylon
43B83326G01	Bushing, Flange (Nylon)

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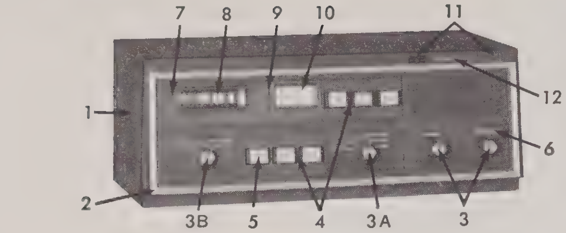
*pre-1971 with tube output

"Micor" Base Stations-Replacement Parts



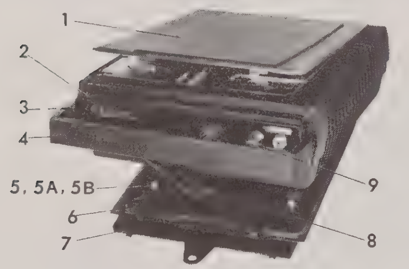
Extended—Local Control Console

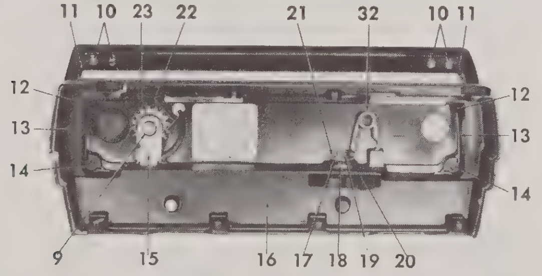
REF. SYMBOL	PART NUMBER	DESCRIPTION
1	15-83113G02	Housing
	5-83786C01	Rubber Feet
	3-82538E01	Screw, Special (Captive)
2	64-83123G02	Panel and Bezel
	7-83118G01	Front Frame
	2-83599D04	Nut, Speed
3	18-84609E02	Pot, (100 ohm) Off-Volume
	18-82515B51	Pot, (25K) Squelch
	36-82629H02	Knobs
3A	40-84359B01	Switch Rotary (Off—F1 Thru F5)
3B	40-83304G02	Switch 2P, 4 Pos. (F1 Thru F4)
4	64-83071G21	Insert, Switch (Blank)
	64-83071G22	Insert, Switch (Opening #1)
	64-83071G23	Insert, Stwich (Opening #2)
	64-83071G24	Insert, Switch (Opening #1, #2)
	64-83071G25	Insert, Switch (Opening #1, #3)
	64-83071G26	Insert, Switch (Opening #1, #2, #3)
5	40-83271G04	Switch, Pushbutton Intercom & Transmit (Not Locking—Single Lamp)
	40-83271G08	Switch, Pushbutton (Take Over) Locking—(Single Lamp)
	40-83271G14	Switch, Pushbutton (2 Freq.) (Locking—Twin Lamp.)
	40-83271G03	Switch, Pushbutton (P.L. Disable) (Not Locking—Single Lamp)
	54-84325A01	Labels, Switch (Assortment)
6	54-84841E01	Labels, (Assortment—Off-On, Volume, Etc.)
7	64-84217A02	Insert, Clock
	64-83074G03	Insert, Clock (Blank)
8	72-84216A09	Clock (12 Hr)
	72-84216A10	Clock (24 Hr)
	61-83072G01	Window, Clock
9	64-83073G04	Insert, Meter
	64-83073G03	Insert, Meter (Blank)
10	72-83270G01	Meter, Vu
11	65-83241G01	Jewel, Lite (Red)
	65-83241G02	Jewel, Lite (Grn)
	9-82778C01	Socket, Pilot Light
	15-83154G01	Cover, Light
	2-83599D02	Nut, Speed
12	33-84151E01	Nameplate (Motorola)

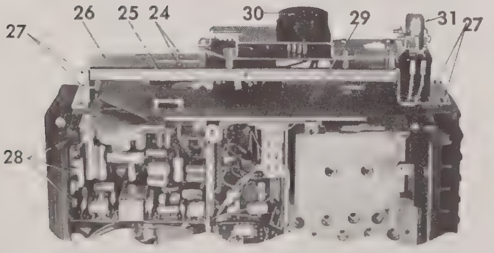
Non Referenced Items

65-861828	Lamp (14V) #330 4/with Switches
65-82010C03	Bulb, Min. Bay. (14V) #756
65-475395	Fuse (¼ Amp 3AG 125V)
50-82774C03	Speaker 16 Ohm (3 x 5 PM)
1-80736B15	Marker Strip (Riveted)
42-83629G01	Fastener

Railroad "Micor" Replacement Parts







CODE NUMBER	MOTOROLA PART NO.	DESCRIPTION
1	15-84123D01	Cover, top
2	13-84061D01	Escutcheon
3	4-849234	Washer, insulator
4	55-84930C01	Handle
5	2-847043	Nut ¼-20
5A	3-121856	Screw Machine
5B	4-119331	Washer, split
6	1-80719B77	Cover, Bottom; incl. guide rail
7	64-84324D01	Adapter plate, bottom
8	1-80723B64	Lever Latch, incl. spring
9	55-84298C01	Lock Assembly, incl. key (#2135) and locknut
10	3-122318	Screw, hex head; 6-32 x 5/16
11	1-80723B63	Bracket, pivot
12	22-84019D01	Pin, detent
13	41-84022D01	Spring, detent
14	2-868622	Fastener, Tinnerman
15	45-84026D01	Cam Lock
16	64-84931C01	Panel, front
17	4-10059A26	Washer, spring
18	43-84040D01	Bushing, latch
19	3-124890	Screw, machine; 10-32 x ⅜
20	32-84167D01	Shim, latch lever
21	64-84058D01	Plate Latch
22	41-84023D01	Spring, lock
23	4-124837	Washer, lock
24	3-134212	Screw, tapping; 4-40 x 5/16; incl. lock washer
25	80-84177D01	Spark Gap
26	1-80723B65	Chassis, connector
27	3-134169	Screw, tapping: 4-40 x ¼
28	3-136934	Screw, tapping; 6-32 x ⅜
29	64-84048D01	Plate, locking
30	TLN-4579A	Board, Front Connector
31	TLN-4295A	Antenna Switch
32	41-84176D01	Spring Latch Lever

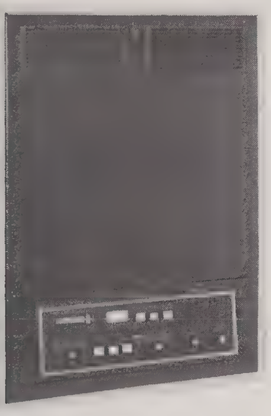
Non-Referenced Items

TLN-4574A	Control Board
TLN-4579A	Front Connector Board
TLN-4581A	Audio Filter Board
TLN-4577A	Transient Filter Board
TLN-4578A	Fuse Board
TPN-6064A	13.6V dc Power Converter Board
TPN-6065A	72V dc Power Converter Board
TLN-4576A	High End Regulator Board
TLN-4575A	13.6V Direct Board

(All other boards are standard Micor plug-ins)

TLN-1007D	Mounting Rack
TMN-6002C	Dynamic Handset
TMN-6043B	Dynamic Handset with armored cable

"Micor" Base Stations
30" Compa-Station Indoor Cabinet



Controls May Be Top Front Mount
or Bottom Front Mount.

PART NUMBER	DESCRIPTION
THN6152A	Cabinet Local Kit
THN6141A	Cabinet Extended Local Kit
15-84107D02	Cabinet Local W/Doors
15-84107D01	Cabinet Extended Local W/Doors
15-84107D03	Basic Cabinet (Local, Extended Local & Remote)
15-84107D07	Door, Front (Short) (Local)
15-84107D06	Panel, Lower Mtg. (Local)
43-84082D01	Bracket, Panel Mtg. (Local) (2 Req'd)
3-129468	Screw Tpg 10-16 x ⅝" Pln. Hex.
4-7652	Lockwasher #10 Ext. Stl. Cad.
15-84107D04	Door, Front Full (Extended Local & Remote)
15-84107D05	Door, Back (Local, Extended Local & Remote)
13-84430D01	Vents, Door (Local, Extended Local & Remote)
2-83599D02	Speed Nut
55-83616B01	Lock & 2 Keys
55-893872	Key #2135
3-135038	Screw Tpg. #14 x ¾" Phl. Pan. Hd. (Chassis Mtg.)
2-82360B07	Speed Nut
TKN6586A	Extended Local Control Cable Kit 10 Ft.
TKN6587A	Extended Local Control Cable Kit 25 Ft.
TKN6588A	Extended Local Control Cable Kit 50 Ft.
TKN6589A	Extended Local Control Cable Kit 100 Ft.
11-84454E01	Touch-up Stick (Vinyl) Shadow White
11-84454E02	Touch-up Stick (Vinyl) Shadow Bronze

**See Extended Local Control Console For Replacement Parts On Control Panel*

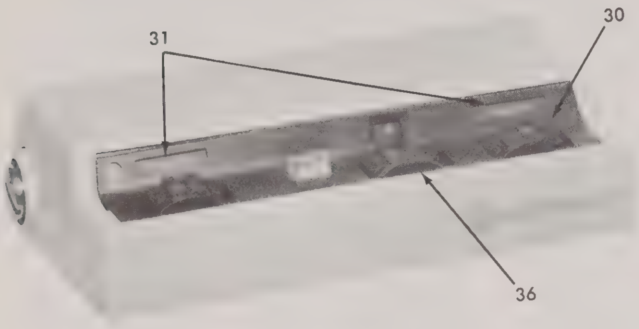
"Micor" Base Stations
41" Remote Indoor Cabinet

PART NUMBER	DESCRIPTION
THN6142A	Cabinet, Remote Kit
15-84143D01	Cabinet, Remote W/Doors
15-84143D02	Basic, Cabinet
15-84143D03	Door, Front
15-84143D04	Door, Back
13-84430D01	Vents, Door
2-83599D02	Speed Nut
55-83616B01	Lock & 2 Keys
55-893872	Key #2135
3-135038	Screw Tpg #14 x ¾" Phl Pan HD (Chassis Mtg)
2-82360B07	Speed Nut
11-84454E01	Touch-up Stick (Vinyl) Shadow White
11-84454E02	Touch-up Stick (Vinyl) Shadow Bronze

"Micor" Base Stations
46" Outdoor W.P. Remote Cabinet

PART NUMBER	DESCRIPTION
THN6143A	Cabinet 46" Outdoor Kit W/Out Vents
15-84144D01	Cabinet, 46" Outdoor W/Doors
15-84144D02	Basic, Cabinet
15-84144D03	Door, Front & Back
55-83616B01	Lock & 2 Keys
55-893872	Key #2135
TLN4862A	Outdoor, Vents
15-84188D01	Cover, Outdoor Vent #1
15-84188D02	Cover, Outdoor Vent #2
32-84452D01	Gasket, Long
32-84452D02	Gasket, Short (2 Req'd)
7-84187D01	Bracket, Vent (12 Req'd)
3-1382209	Screw, Tpg. 6-32 x ⅜" Phl. Pan. Hd. Znc. (Vent. Brkt. Mtg.)
3-138674	Screw, Mch Scr. 6-32 x $\frac{11}{16}$" Phl. Pan. SST. (Vent Mtg.)
4-9759	Lockwasher #6 MD. Split SST.
3-135038	Screw Tpg. #14 x ¾" Phl. Pan. Hd. (Chassis Mtg.)
2-82360B07	Speed Nut
11-84454E03	Touch-up Stick (Shadow Tan)

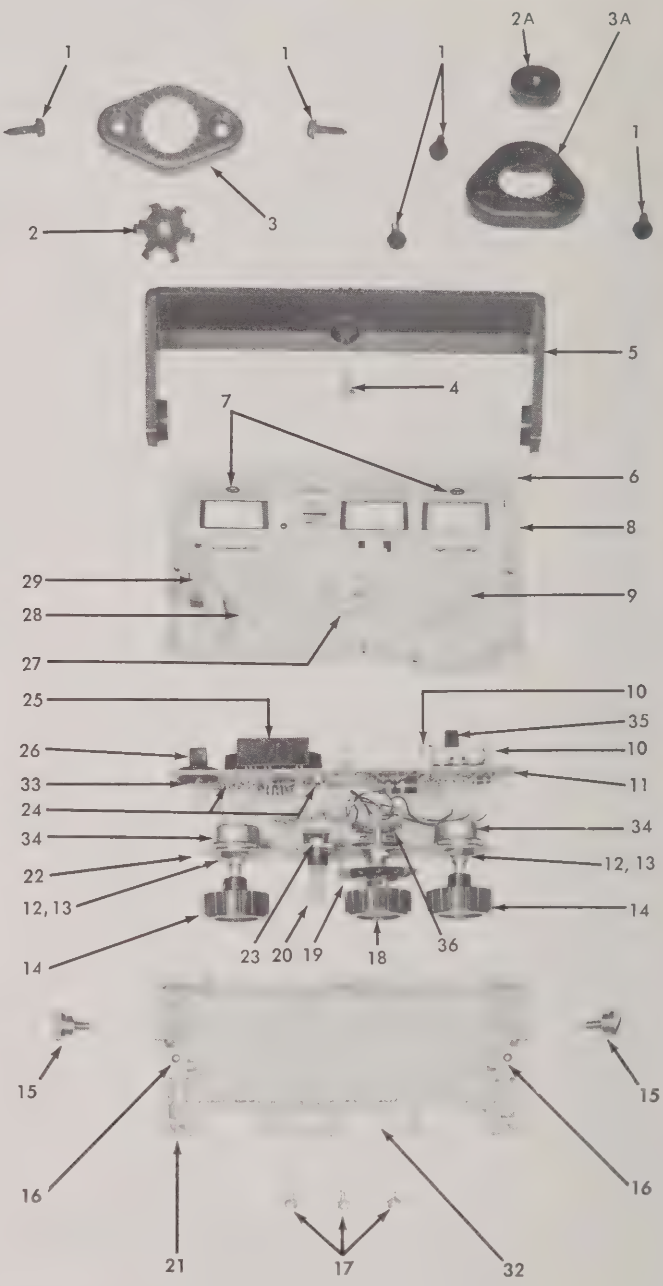
Micor Control Head Parts List



TCN1091B (Single-Freq.)
TCN1092B (Multi-Freq.)

CODE NUMBER	MOTOROLA PART NO.	DESCRIPTION
1	3S136756	SCREW, tapping: 10-16 x ⅝″ plain hex flanged head; does not include 4S7652 LOCKWASHER: No. 10 external
2	49B84592B01	DISC, trunnion bracket mounting: "breakaway" type (2-hole)
2A	49-84961C01	(3-hole)
3	42C84591B01	COLLAR, trunnion bracket mounting
3A	42-84963C01	(3-hole)
4	3S115727	LOCKSCREW, machine: 10-32 x ½″ plain hex head (2-hole)
5	7C84576B01	BRACKET, trunnion
6	75B84628B01	FRONT COVER, housing ("bumper")
7	3S136963	SCREW, tapping: 6-20 x 5/16″ Phillips flat head
8	1V80712B88	TOP COVER ASSEMBLY, housing: includes items coded 6, 7, 9, 27, 28, 29, 31
9		PRISM, optical (SEE NOTE)
10	3S122897	LOCKSCREW, machine: 4-40 x ¼″ plain hex head
11	TLN4369B	PLATED CIRCUIT BOARD ASSEMBLY: includes 29-84547B01 contact terminals
12	2S136272	NUT, machine: ⅜-32 x ½″ hex
13	4S8210	WASHER, metallic: 0.39″ x 0.562″ x 0.16″
14	36D84001C02	KNOB, control (volume & squelch)
15	3B84546B01	SCREW, machine: shoulder type (trunnion-mount)
16	3B84548B01	SCREW, machine: 6-32 x ½″ "Phillips" round head; "captive" type
17	3S136138	LOCKSCREW, machine: 6-32 x ⅜″ Phillips hex head
18	36D84001C01	KNOB, control: (freq. selector) (requires use of item coded 19)
19	36D84006C01	DISC, switch position indicator (used with item coded 18)
20	45C84004C01	ACTUATOR, switch
21	15E84920B01	HOUSING (bottom section)
22	7C84005C01	BRACKET (chassis)
23	1V80712B89	SWITCH ASSEMBLY: (slide switch); includes wires, contact terminals and mounting screws
24	3S135084	LOCKSCREW, tapping: 4-40 x 5/16″ Phillips fillister head
25	42D84067C01	RETAINER, connector
26	9B84627B01	LAMPHOLDER
27		PRISM, optical (SEE NOTE)
28		PRISM, optical (SEE NOTE)
29		PRISM, optical: includes RED LENS (SEE NOTE)

NOTE: Items coded 9, 27, 28 and 29 are not individually replaceable. For field-replacement, order item No. 8 (TOP COVER ASSEMBLY).

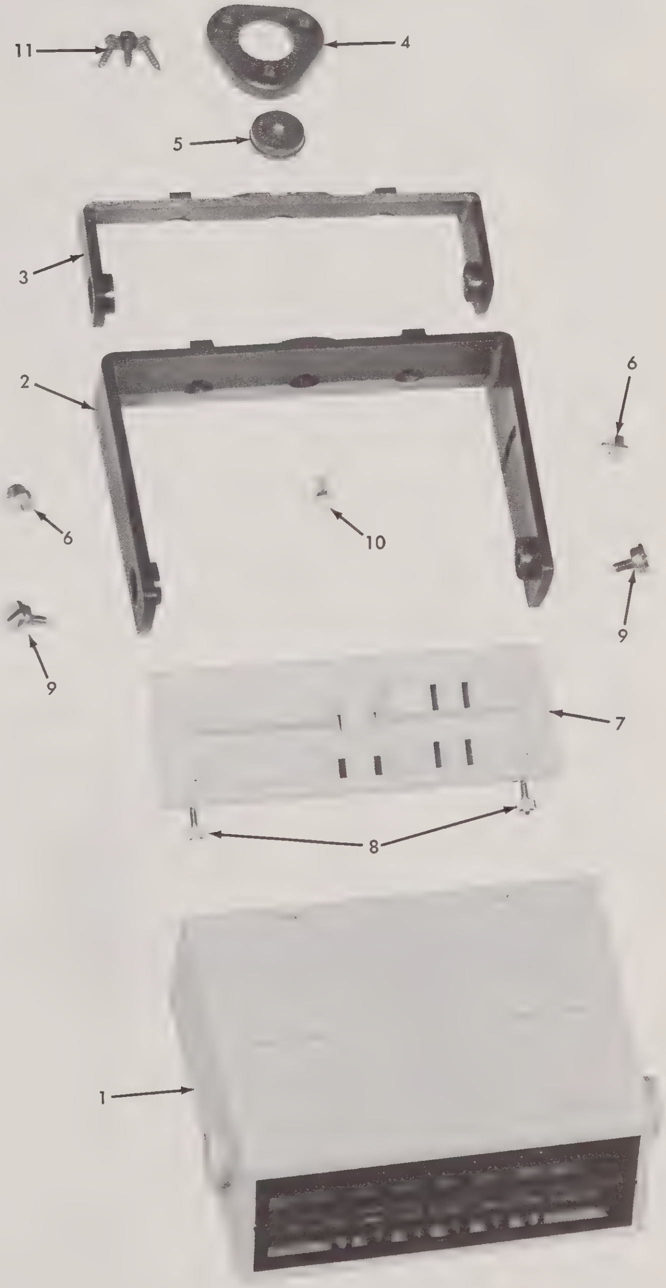


TCN1091B (Single-Freq.)
TCN1092B (Multi-Freq.)

CODE NUMBER	MOTOROLA PART NO.	DESCRIPTION
30	13D84000C01 or 13D84000C02	BEZEL (single-frequency) BEZEL (multi-frequency)
31	33C84038C01	MARKER STRIP (VOLUME, SQUELCH)
32	38B84357C01	PLUG, SNAP-IN (single-frequency)
33	65B83554G01	**LAMP, incandescent miniature wedge base:** 12 V; 0.19 A; type No. 161 (2 Req.)
34	18C84584A02	variable: 25K ±30%; ¼ W (2 Req.)
35	40C84622B01	slide: spst
36	40C84149C01	rotary: 4-position; non-shorting adjustable limiting stop
		NON-REFERENCED ITEMS
		RESISTOR,
	6S488090	fixed: 56 ±10%; 2 W
	6S6291	fixed: 560 ±10%; ½ W
	6S5581	fixed: 3, 3K ±10%; ½ W
	6S6373	fixed: 150 ±10%; ½ W
	54B84577B01	MOUNTING TEMPLATE (2-hole)
	54-84111D01	MOUNTING TEMPLATE (3-hole)

MECHANICAL REPLACEMENT PARTS

	PART NUMBER	DESCRIPTION
1	1-80717B55	Housing
2	7-84809B01	Trunnion, long
3	7-84576B01	Trunnion, short
4	42-84963C01	Retainer
5	49-84961C01	Disc., breakaway
6	58-84318C01	Clutch adapter
7	15-84268C01	Rear cover
8	3-84322C01	Thumb screw
9	3-84546B01	Screw (Spcl. Mtg. THN-6124A only)
10	3-115727	LCK. screw
11	3-136756	Tpg. screw



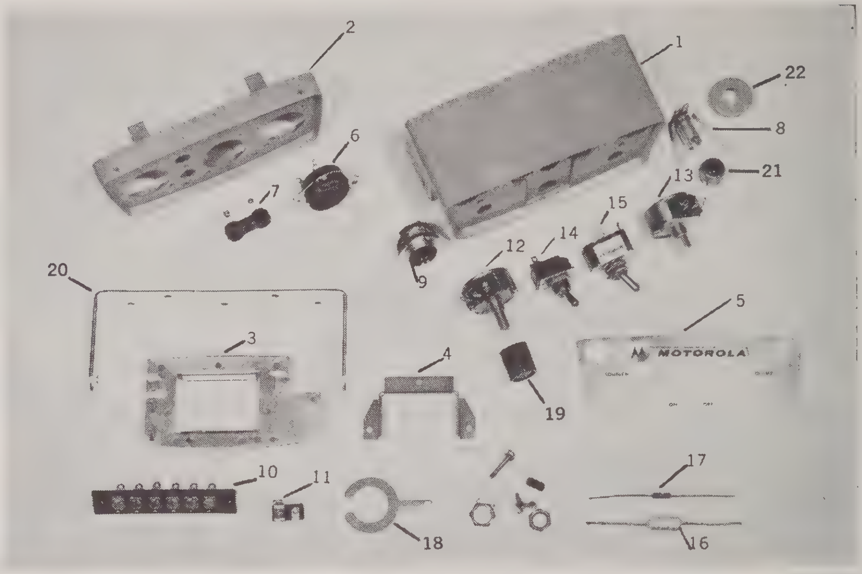
NON-REFERENCED ITEMS

PART NUMBER	DESCRIPTION
54-84111D01	Mounting template
66-84690C01	Contact removal tool
54-84632C01	Glossary labels (wild card)
38-84321C01	Push button, shadow pearl
38-84321C02	Push button, orange
ESCUTCHEONS	
13-84319C11	Chan scan pri.
13-84319C09	Chan scan non pri.
13-84319C01	Quik call & Quikcall II
13-84319C07	Public address
13-84319C19	Singletone 1 tone
13-84319C05	Singletone 5 tone
13-84319C21	Alt. control module 1 freq.
13-84319C14	Alt. control module 4 freq.
13-84319C16	Multi. PL 4 tone encoder
13-84319C06	Multi. PL 8 tone encoder
13-84319C22	Wild card
13-84319C03	Voice privacy adapter
13-84319C12	Blank (Micor)

Control Heads

TCN 6000 SERIES AND TCN 6001 SERIES CONTROL HEAD PARTS REPLACEMENT LISTING

PART NUMBER	FIG.	DESCRIPTION	MODEL NO.
15D82513B01	1	Housing	TCN6000 & TCN6001 Series
15C 861198	2	Housing Ext.	
64C 855103	3	Plate, Receptacle Mtg.	TCN6001 Series TCN6000 Series
7B 855113	4	Bracket, Connector Mtg.	TCN6000 Series
13D 859614	5	Escutcheon—1-Freq.	Standard Squelch (TCN6001AA)
13D 859615		Escutcheon—2-Freq.	Standard Squelch (TCN6001AB)
13D 859616		Escutcheon—1-Freq.	Dual Squelch (TCN6001AC)
13K 859617		Escutcheon 2-Freq.	Dual Squelch (TCN6001AD)



PART NUMBER	FIG.	DESCRIPTION
9B 855150	6	Socket, Tube (9 Pin)
9K 82810	7	Socket, Speaker
9A 859619	8	Socket, Pilot Light
9B 16345	9	Receptacle, MIC (4-Prong)
31A 890699	10	Board, Term. (6 Screw)
31R 490141	11	(Strip, Term. (1 Ins. #2 Mtg.)
18K 855108	12	Potentiometer (Volume)
18D82515B03	13	Potentiometer (Squelch)
40-482097	14	Switch, Toggle (TCN6001 Series)
40B 858304	15	Switch, Toggle (TCN6000 Series)

PART NUMBER	FIG.	DESCRIPTION
17K 892469	16	Resistor, W.W. (4-2-1W)
6R 488016	17	Resistor (33-10-2W)
6R 6336		Resistor (270-10-1W)
3S 400356		TPG. Screw (#4 x ¼" PLN. Hex.)
3S 124542		Lock-Screw (6-32 x ¾" PLN. Hex.)
3S 122897		Lock Screw (4-40 x ¼" PLN. Hex.)
37K 800655		Sleeve Neoprene
29R 5279	18	Lug

PART NUMBER	FIG.	DESCRIPTION
38B 82033B03	22	Button, Plug
36B 855027	19	Knob, Control
3-7302	23	Screw, 10-32 x ½" Hex.
61B 859620	21	Cap & Jewel (Red)
61K 859621	21	Cap & Jewel (Green)
7K 858250		Bracket
7B 855239	20	Bracket (Cont. Head Mtg.)
2S 8382		Nut (2 Req.)
4S 7691		Lockwasher (⅜ INT.)
5S 7707		Rivets (.122 x 5/32" Stl.)
2S 8364		Nut (⅜"-32 x ½" Hex.)

"MOTRAC" AND "MOCOM" SERIES CONTROL HEAD PARTS REPLACEMENT LISTING

ESCUTCHEONS

PART NUMBER	CONTROL HEAD MODELS
13K 857971	TCN6008, 9, 25, 26, 97, 98AE series
13K 857972	TCN6008, 9, 25, 26, 97, 98AF series
13K 857975	TCN6008, 9, 25, 26, 97, 98AG series
13K 857976	TCN6008, 9, 25, 26, 97, 98AH series
13D 82286C08	TCN6046, 48AE series
13D 82286C09	TCN6046, 48AF series
13-82286C06	TCN6046, 48AG series Replaces 13-82286C10
13D 82286C11	TCN6026, 48AH series
13D 82286C12	TCN6049AJ series
13D 82286C16	TCN6046, 48BE, 99AE, 6100AE series
13D 82286C17	TCN6046, 48BF, 99AF, 6100AF series
13D 82286C18	TCN6046, 48BG, 99AG, 6100AF series
13D 82286C19	TCN6046, 48BH, 99AH, 6100AH series
13D 82286C20	TCN6046AK, TCN6100AK series
13D 82286C21	TCN6046AJ, TCN6100AJ series
13D 82286C22	TCN6026, 98AK series
13D 82286C23	TCN6026, 98AJ series
13D 82286C24	TCN 6118AF
13D 82286C25	TCN 6118AH
13D 82517B01	TCN6027, 30, 34AE series
13D 82517B02	TCN6027, 30, 34AF series
13D 82517B03	TCN6027, 30, 34AG series
13D 82517B04	TCN6027, 30, 34AH series
13D 82517B09	TCN6045, 47AH series
13D 83399H01	TCN 6132AE, TCN 6133AE Series
13D 83399H02	TCN 6132AG, TCN 6233AG Series

HOUSINGS & MOUNTING BRACKETS

PART NUMBER	DESCRIPTION	MODEL NO.
1V 868494	Housing	TCN6008AE, AF, AG, AH, 09AE, AF, AG, AH, 25AE, AF, AG, AH, 26AE, AF, AG, AH, AJ, AK, 46AJ, AK, 49AJ series
1V 80700B68	Housing	TCN 6132AE, AG Series
1V 80709A19	Housing	TCN6027AE, AF, AG, AH, 30AE, AF, AG, AH, 34AE, AF, AG, AH series
15D 83576D03	Housing	TCN6098AE, AF, AG, AH, 98AE, AF, AG, AH, AJ, AK series
15D 83576D05	Housing	TCN 6133AE, AG Series
15C 82401D01	Back cover	For all "Motrac" radio trunk mount control head series
15D 83391H01	Back cover	For "Mocom" Series
7B 82400D01	Bracket, control head mounting	For all "Motrac" radio trunk mount control head series

SOCKETS

PART NUMBER	DESCRIPTION
9K 830418	Receptacle, chassis (4 pin) Mic. Recp.
9B 863168	Socket, pilot light
9C 801050	Connector, female (19 pin) to radio
9B 855112	Socket, Connector

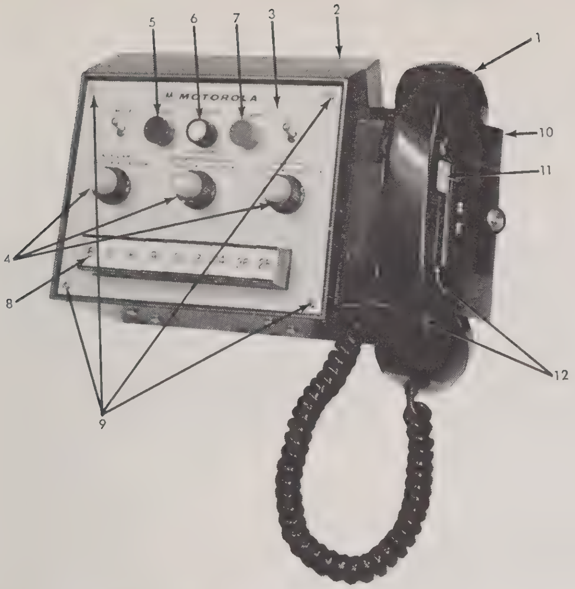
JEWELS, KNOBS, BRACKETS & HARDWARE

PART NUMBER	DESCRIPTION
13B 861579	"Motrac" nameplate—used on TCN 6008
33-83488G07	"Motran" 09, 27, 47 series Replaces 33-83088A01
33B 83646D01*	"Motran" nameplate—used on TCN 6097
33B 83646D03*	"Motrac" 98, 99, 6100 series
33B 83646D02	"Motran" nameplate—used on TCN 6025
33B 83646D04	"Motrac" 26, 30, 34, 45, 46, 48, 49 series
61A 865158	Jewel Pilot Light (Red)
61A 865159	Jewel Pilot Light (Green)
61B 83678D01*	Jeyel Pilot Light (Red)
61B 83678D02*	Jewel Pilot Light (Green)
26B 83806D01*	Shield, light (L.D.R.)
2S 8382	Nut (15/32-32 9/16 Hex)
2S 8364	Nut (⅜-32½ Hex)
3A 82670A01	Screw, Control Hd Mtg
3A 82227A02	Screw, Special 4-40 x 7/16"
3B 82126B06	Screw, Nylon (4-40 x ¼" S/T. Rnd)
3A 83397H01	Screw, Conn. "Mocom"
4A11722	Washer, "C"
36K 858652	Knob, Control (Vol. or Sql.)
36-82869D03	Knob, Control (Freq.) Replaces 36-82869D01
2K 482070	Nut ring (for chassis recept.)
31A 824974	Board, Fuse mtg.
15B 855111	Cover, socket
15C 82401D01	Cover, Back
31C 857699	Board, Terminal (35 lug)
31C 83826D01*	Board, terminal (35 lug)
1V 80763A35*	Assembly, light dimmer board

*Used on dimmer light series control heads

CONTROLS & SWITCHES

PART NUMBER	DESCRIPTION
40A 80246	Switch, toggle (DPDT)
18K 857840	Potentometer (25K ±30%)
18C 857697	Control & Switch (25K ±30% 3A @ 120V SW)
18C 857698	Potentiometer (25K ±30%)
40K 80247	Switch, toggle (PL Switch DPST)
18C 868896	Control & Switch (25K ±30% inc 23A @ 14V)
40C 83624D01	Switch, rotary (1 Pole—4 Pos.)
40C 83624D01	Switch, Rotary (4 Freq.)
40C 83640G01	Switch, Rotary (1 Pole—3 Pos.)
40B 83647D01	Switch, toggle (DPST)

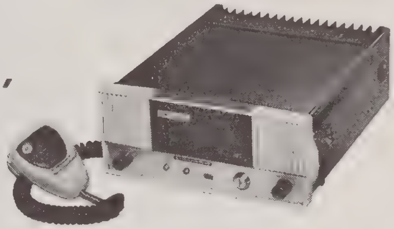


MARITIME MOTRAN

Control Head, Call Light and Ringer Replacement Parts for TCN6119A and TCN6120A

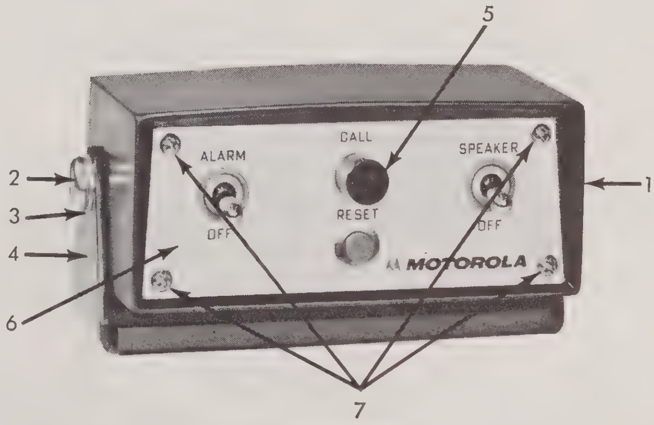
PART NO.	FIG.	DESCRIPTION
1V80773A95	1	Hand Set (Complete with Transmitter Cartridge)
50D83121G01		Hand Set W/Coiled Cord (Less Transmitter Cartridge)
59D82933C01		Cartridge, Transmitter
59-83471A63		Cartridge, Receiver
3S124432		Flathead Screw
15B84053A01		Switch Cover
40C84087A01		Switch Assembly
15C84059A01		Handset Housing
15C84054A01		Receiver Cap
15C84055A01		Transmitter Cap
30P84300A72		Coiled Cord
42P84300A71		Clamp, Cable
15E83066G01	2	Housing (Bulkhead mount)
15E83066G03		Housing (Desk mount)
13C83769G01	3	Escutcheon
36B82712E01	4	Dual Knob (Top and Bottom)
65B83777G03	5	Pilot Light Assembly (Green)
36B82628H02	6	Knob
65B83777G04	7	Pilot Light Assembly (Red)
38C83814G01	8	Push Button Channel 6
38C83814G02	8	Push button Channel 7
38C83814G03	8	Push button Channel 8
38C83814G04	8	Push button Channel 9
38C83814G05	8	Push button Channel 10
38C83814G06	8	Push button Channel 11
38C83814G07	8	Push button Channel 12
38C83814G08	8	Push button Channel 13
38C83814G09	8	Push button Channel 14
38C83814G10	8	Push button Channel 16 (Yel)
38C83814G20	8	Push button Channel 16 (wht)
38C83814G11	8	Push button Channel 18
38C83814G12	8	Push button Channel 19
38C83814G13	8	Push button Channel 20
38C83814G14	8	Push button Channel 24
38C83814G15	8	Push button Channel 25
38C83814G16	8	Push button Channel 26
38C83814G17	8	Push button Channel 27
38C83814G18	8	Push button Channel 28
38C83814G19	8	
38C83814G21	8	Push button Channel 23
3S488006	9	Screws
15D82219G01	10	Handset cradle housing
42C83792G01	11	Handset retainer Clip
43B82224G02	12	Handset retainers (2 used)
22A82223G01		Switch plungers (not shown)

BUSINESS "DISPATCHER" RADIO PARTS LIST



PART NUMBER	DESCRIPTION
THN 6028A	Housing, complete
1V 80711A86	Radiator Assembly
33D 83076H01	Panel escutcheon, 1-freq., Std. Squelch
33D 82709C02	Panel escutcheon, 2 freq., Std. Squelch
33D 82709C03	Panel escutcheon, 1-freq., Dual Squelch
36K 858652	Knob (2 used)
64-82766C05	Panel, door (left)
64-82766C03	Panel, door (right)
64D 82766C01	Front panel casting
13B 82776C01	Grille, speaker
32B 82775C01	Gasket, grille
33A 82124B01	Logotype, nameplate
50C 82774C01	Speaker 3" x 5"
9B 82778C01	Socket, pilot lite
61A 82720C01	Jewel, red
61A 82720C02	Jewel, green
2C 82360B03	Nut, speed (for mtg.)
65C 82010C02	Bulb, #1445
55A 82082D01	Lock w/key
55-893872	Key only

Replacement Parts For TLN 1229A Control Head



PART NO.	FIG.	DESCRIPTION
15D83357H01	1	Housing
3B84015A01	2	Screw (2 used)
4S1727	3	Flatwasher, metal (2 used)
4K890078		Flatwasher, fiber
7B83368H01	4	Mounting Bracket
9B84017A01	5	Light assembly (Red)
13B83353H01	6	Escutcheon
3S2941	7	Screws

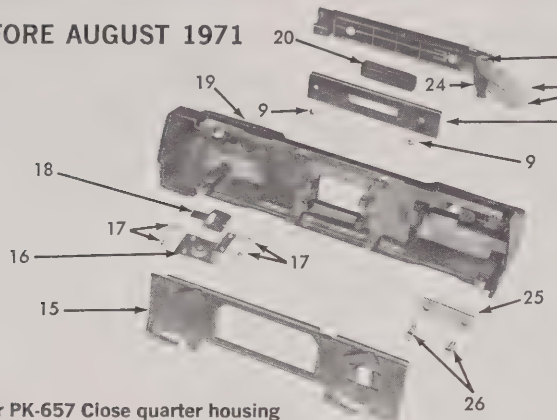
NOTE: For electrical parts which are not shown in above listings refer to manual.

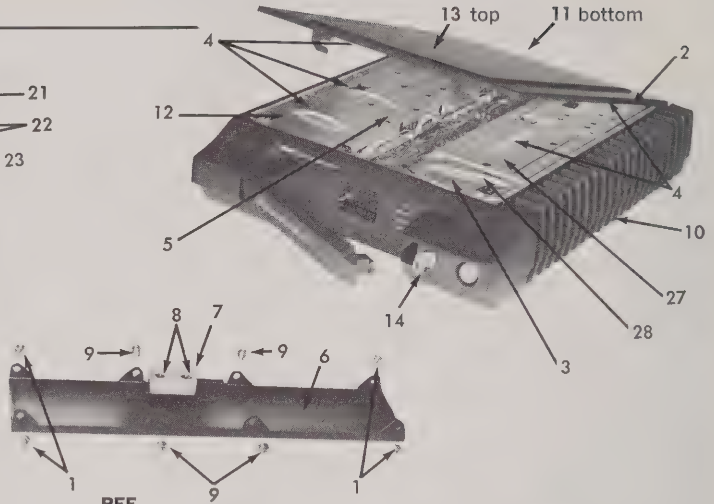
Maritime Accessories

MODEL NO.	DESCRIPTION
TLN8482A	Ground Reversing Kit Positive or Negative Ground
TKN6342A	Main Cable Kit
TKN6343A	Auxiliary Cable Kit
TSN6000A	Speaker
TLD1410A	Antenna Coupler for use with the Present Radio Set and Two Outboard Receivers
TLN1097A	Time-out Timer

“Micor” Radio Parts List

BEFORE AUGUST 1971



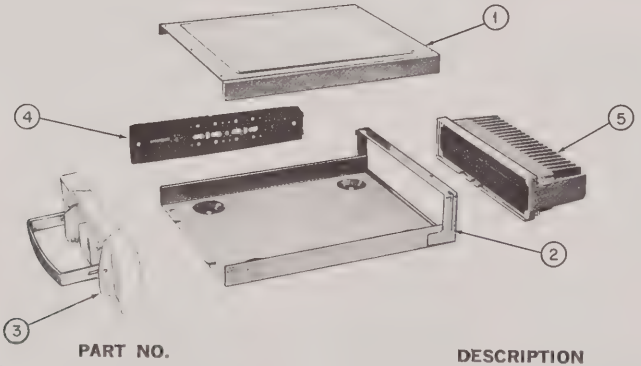


Order PK-657 Close quarter housing conversion kit for underseat applications.

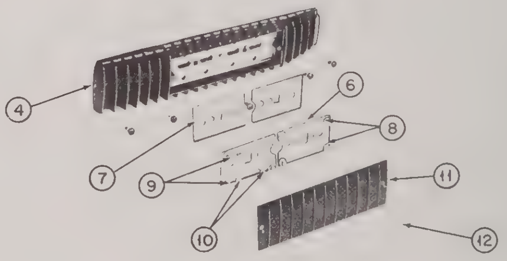
REF. SYMBOL	PART NO.	DESCRIPTION
1	3-136907	Screw, tapping: No. 8-32 x ⅝″ “Phillips” binder head; 8 req’d
2	1-80709B40	Shield, exciter
3	1-80709B41	Shield, power control board
4	55-84300B01	Handle, large: 6 req’d
5	1-80709B39	Shield, receiver rf & i-f board
6	64-84100B01	Plate, rear
7	46-84167B01	Block, “drawer” guide rear
8	3-124074	Screw, machine: No. 8-32 x ½″ “Phillips” binder head; 2 req’d
9	3-136908	Screw, tapping: No. 8-32 x ⅜″ “Phillips” binder head; 10 req’d
10	26-84089B01	Heat Sink
11	1-80719B58	Cover, bottom. Replaces 1-80708B19
12	26-84256B01	Shield, audio & squelch board
13	15-84123D01	Cover, top. Replaces 15-84095B01
14	55-84101B01	Lock, includes key
15	64-84097B01	Plate, locking

REF. SYMBOL	PART NO.	DESCRIPTION
16	42-84293B01	Cam, retainer
17	3-134212	Lockscrew, tapping: No. 4-40 x 5/16″ “Phillips” hex head; 8 req’d
18	45-84288B01	Cam, lock
19	64-84087B01	Panel, front
20	75-84424B01	Bumper, rubber
21	22-84291B01	Pin, pivot
22	64-84289B01	Plate, handle
23	43-84273B01	Handle, insert
24	55-84667B01	Handle, front panel
25	55-84301B01	Plate, jam
26	3-136909	Lockscrew, tapping: No. 10-32 x 11/16″ plain hex head; 2 req’d
27	26-84385B01	Shield, power amp (45 watt & 60 watt)
	26-84588B01	Shield, power amplifier (90/110 watt)
28	55-84300B02	Handle, small

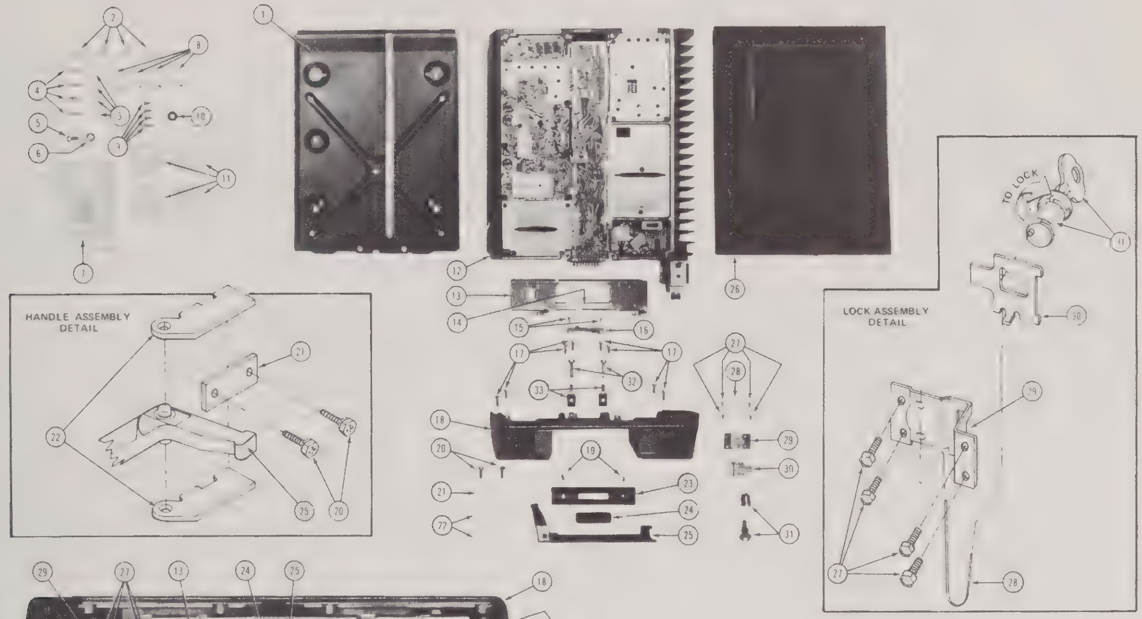
MOTRAC HOUSING REPLACEMENT PARTS

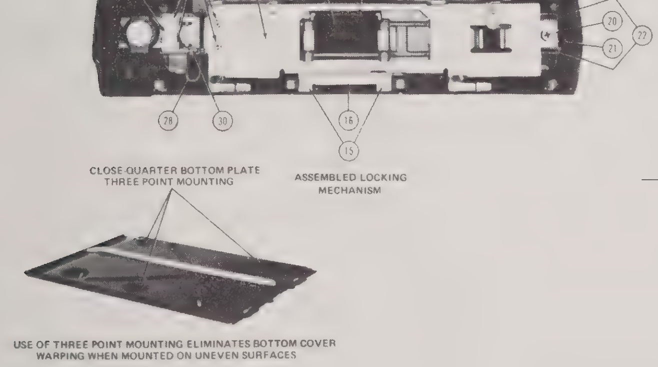


SIDE AND BACK HEAT SINKS



CODE	PART NO.	DESCRIPTION	MOTRAC RADIO
1	15-852668	Top cover (housing)	All models
2	15-852664	Bottom cover (housing)	All models
3	TGN-5002A TGN-6034A	Front panel	All Models except 6/12 “Extender” models For 6/12 volt “Extender” models
4	15-83125G01 15-83125G01	Power supply radiator	For 25 w, 30 w, and 50 w models For 60 w, 80 w, and 100 w models
5	15-867111 15-865665 15-82128E01 15-82127E01	Transmitter radiator	For 30 w, and 50 w models For 25 w models For 100 w models For 60 w and 80 w models
6	64-82344A01	Transistor mounting plate	All models
7	14-82343A01	Mica insulator	All models
8	4-82345A01	Plastic shoulder washer	All models
9	3-131281	Lockscrew: 6-32 x ⅜″	All models
10	3-122318	Lockscrew: 6-32 x 5/16″	All models
11	15-83124G01	Heat sink cover	All models
12	3-131440	Screw: 6-32 x ⅜″ “Phillips”	All models



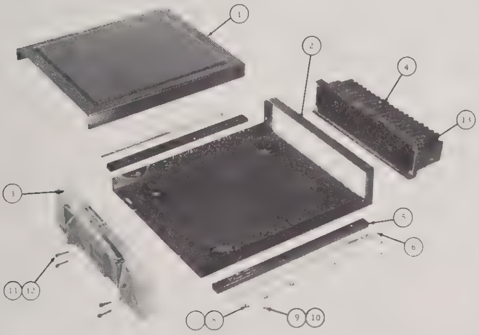


CLOSE QUARTER BOTTOM PLATE THREE POINT MOUNTING

ASSEMBLED LOCKING MECHANISM

USE OF THREE POINT MOUNTING ELIMINATES BOTTOM COVER WARPING WHEN MOUNTED ON UNEVEN SURFACES

BACK HEAT SINK ONLY



CODE	PART NUMBER	DESCRIPTION
1	15-852668	Cover, housing
2	15-852664	Housing
3	TGN-6002A	Front panel
4	15-82961G01	Radiator, xmtr.
5	7-82031H01	Rail, side; 2 req'd
6	15-82032H01	Cover, side rail; 2 req'd
7	3-134175	Screw, machine; #10-32 x ⅜″ "Phillips", 12 req'd
8	4-119332	Lockwasher; #10 split; 12 req'd
9	3-134174	Screw, machine; #8-32 x 7/16″ "Phillips", 4 req'd
10	4-7671	Lockwasher: #8 split; 4 req'd
11	3-132401	Screw, machine; #6-32 x ⅞″ "Phillips"; 4 req'd
12	4-7650	Lockwasher: #6 internal; 4 req'd
13	3-857308	Screw, special radiator mounting; 4 req'd

PARTS LIST

REF. SYMBOL	PART NO.	DESCRIPTION
1	1-80719B58	Cover, bottom. Replaces 15-84031D01
2	43-893898	Bushing, spacer
3	4-119331	Lockwasher: ¼″ split
4	3-129278	Screw, tapping: 14-10 x 1″ plain hex head
5	3-125947	Screw, tapping: 14-10 x ¾″ plain hex head
6	4-7688	Lockwasher: ¼″ internal-external
7	56-84158A28	Bag, plastic: imprinted
8	42-19376	Clamp, cable
9	3-7467	Screw, tapping: 8-18 x ⅜″ plain hex head
10	37-82633B03	Grommet, rubber: 0.625″ x 0.500″ x 0.375″
11	4-122238	Washer, metallic: 2.125″ x 0.257″ x .095″
12		"Micor" Mobile Radio Set
13	64-84122D01	Slide Plate, cover locking
14	64-84965C01	Detent Channel
15	3-134186	Screw, tapping: 6-32 x 5/16″ "Phillips" hex head (ext. lockwasher)
16	1V80722B40	Detent Bracket & Spring Assembly
17	3-138295	Screw, tapping: 8-32 x ⅝″ "Phillips" binder head
18	64-84087B01	Front Panel
19	3-136908	Screw, tapping: 8-32 x ⅜″ "Phillips" binder head
20	3-136909	Screw, tapping: 10-32 x 11/16″ plain hex head
21	55-84301B01	Jam Plate
22	64-84298B01	Pivot Plate, handle
23	43-84273B01	Hand Grip, handle
24	75-84424B01	Cushion, hand grip
25	55-84667B01	Handle. Replaces 55-84090B01
26	15-84123D01	Cover, top
27	3-134212	Screw, tapping: 4-40 x 5/16″ "Phillips" hex head (ext. lockwasher)
28	41-84246D01	Spring, locking bar tensioning
29	42-84244D01	Retainer, locking bar guide
30	45-84245D01	Locking Bar
31	55-84101B01	Cylinder Assembly, key-operated: incl. two keys, part no. 55-893872 (one key)
32	3-138006	Screw, tapping: 8-32 x 1-1/16″ "Phillips" fillister head
33	46-84294B01	Block, Wedge

"MOCOM" Replacement Parts

"MOCOM·10" REPLACEMENT PARTS

(High Band and UHF)

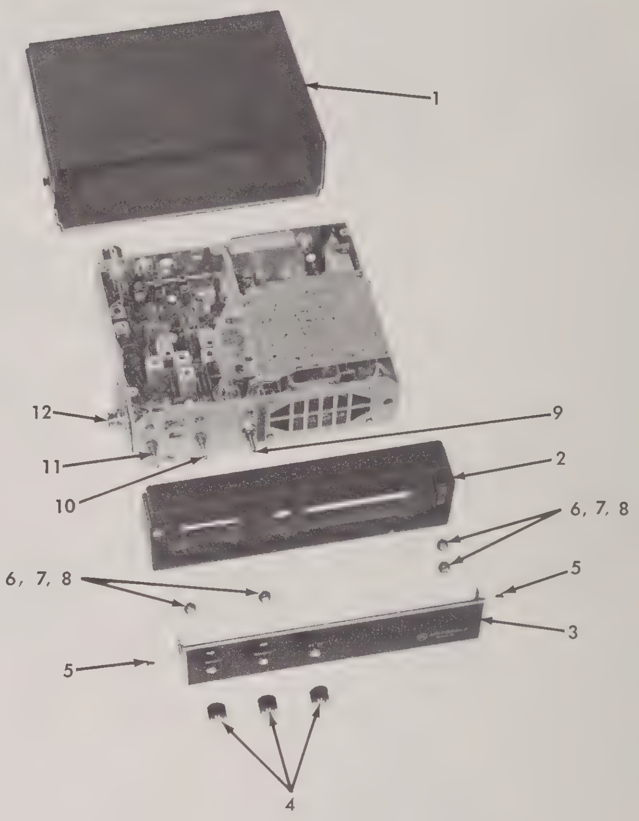
REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1-80724B94	Housing, rear
2	15-84702A09	Housing, front
3	13-84698D01	Escutcheon, 1 freq.
	13-84698D02	Escutcheon, 2 freq.
4	36-82628H17	Knob, Vol. & Sql.
	36-82628H18	Knob, Freq. Switch
5	3-138283	Screw
6	4-84717C10	Washer, stainless steel
7	4-84788A02	Washer, fiber
8	3-7229	Screw, machine 8-32x3/8" binderhead
9	40-84750B01	Switch F1-F2
10	18-84704A01	Pot, 25k (squelch)
11	18-84705A01	Pot, 25k (volume, on-off)
12	Wired in Mic	

NON-REFERENCED ITEMS

9-84766A01	Socket, Lamp
50-84761A01	Speaker
65-84835A01	Lamp

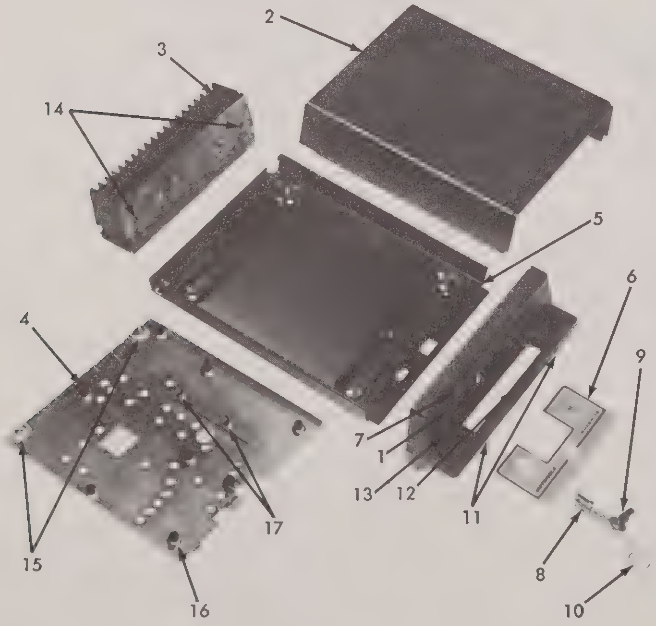
"MOCOM·35" REPLACEMENT PARTS

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1-84222C29	Housing, rear
2	15-84702A01	Housing, front
3	13-84823A10	Escutcheon, 2 freq.
	13-84823A02	Escutcheon, 1 freq.
4	36-84873A01	Knob
5	3-135322	Screw 4-40 x 1/4" SFH
6	4-84717C01	Washer, stainless steel
7	4-84788A02	Washer, fiber
8	3-7229	Screw, machine 8-32 x 3/8" binderhead
9	40-84125C01	Switch F1-F2
10	18-84704A01	Pot, 25 k (squelch)
11	18-84705A01	Pot, 25 k (volume, on-off)
12	1-84222C01	Mike receptacle & spacer assembly



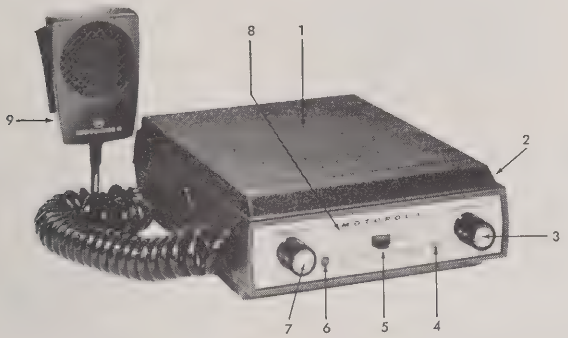
NON-REFERENCED ITEMS

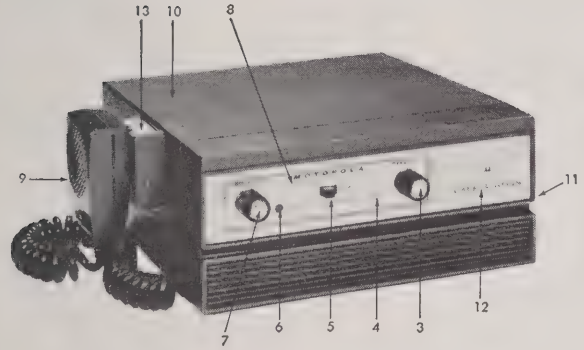
9-84766A01	Lampholder min screw base
65-84835A01	Lamp incandescent screw base type (transmit)
50-84105C01	Speaker



"MOCOM·70" REPLACEMENT PARTS

REF. SYMBOL	MOTOROLA PART NO.	DESCRIPTION
1	45-84904A01	Locking Bar
2	15-84920A03	Cover, housing; top
3	26-84020B01	Radiator (heat sink)
4	15-84491B01	Cover, bottom
5	15-84920A01	Housing, base
6	13-84921A02	Escutcheon
7	55-84912A01	Lock, front panel
8		Barrel, lock: part of Code #7 Must be removed from radio before taking off front panel. Use tool #10
9	55-893872	Key
10	66-84909B01	Tool, for removal of lock
11	3-125457	Screw, special; for handle
12	55-84909A01	Handle
13	1-80708B65	Front panel, does not include Code 7, 11, 12
14	3-135031	Screw, special
	42-82234G01	Retainer
	4-115362	Lockwasher
15	3-84048B01	Screw, special
	42-82388C02	Retainer
	4-115362	Lockwasher
16	75-84962A01	Bumper, rubber
17	43-82721C03	Bushing, snap
	3-135111	Screw, tapping: No. 4-40 x 3/8"





"MOCOM 10" REPLACEMENT PARTS

(Low Band)

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	15E83417G01	Housing, Rear
2	15D83416G01	Housing, Front
3	36B82629H02	Knob (Volume)
	18D83525G01	Pot. Carbon (10K)
4	61A83513G02	Lens (Amber)
5	40B83890A02	Switch, Slide
6	61A83513G01	Lens (Red)
7	36B82629H01	Knob (Squelch)
	18D83514G01	Pot. Carbon (25K)
8	13B83512G01	Escutcheon (As Shown)
	13B83512G02	Escutcheon (For Unit Without Automute)
9	50D83515G01	Microphone
10	15E83538G01	Housing, Power Supply (Rear)
11	15E83537G01	Housing, Power Supply (Front)
12	13C83539G01	Escutcheon
13	1-80781A81	Kit, Hang-Up Box
	37K802943	Grommet, Rubber
	42A82041B01	Clamp, Wire
	3S129281	Lock Screw (6-32 x 5/16 Phl Rnd)

NON-REFERENCED ITEMS

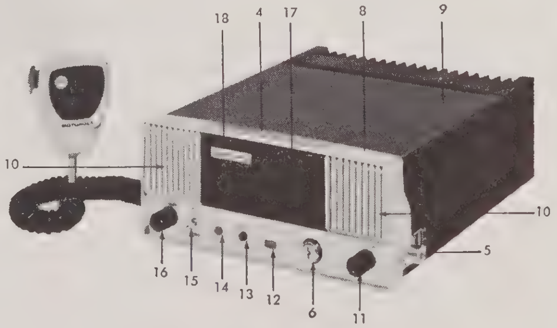
TLN-4400A	Locking Kit for Mocom•10
33B83517G01	Nameplate (Model)
65B83554G01	Bulb, Light (12V) #161
1V80778A20	Assem. Speaker & Grille Riveted
50D83526G01	Speaker
13B83528G01	Grille, Speaker
65S21975	Fuse (1/2A -3AG)

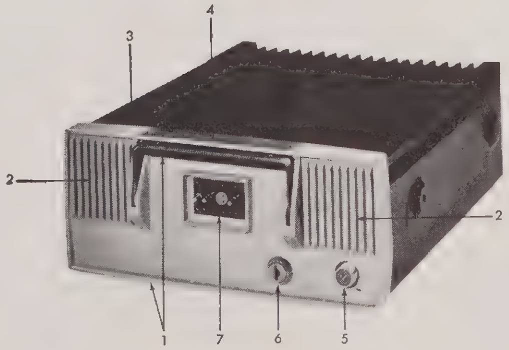
"MOCOM 30" REPLACEMENT PARTS

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1V80777A83	Assem. Front Panel & Handle Riveted
	64D83481G03	Front Panel W/Handle
	1V80777A84	Assem. Handle & Grip Riveted
2	64D83481G01	Panel, Door
3	THN6075A	Housing
4	33B82798C01	Nameplate
	3A892219	Screw, One-Way Slot
5	9C85615	Antenna Connector
	15A483599	Hood U/W Ant. Connector (Internal)
6	55A82082D01	Lock W/Keys
	55K893872	Keys
7	28C802820	Connector, Male (19 Contact)
8	64D83481G05	Panel (Front)
9	THN6028A	Housing
10	64D83481G01	Panel (Door)
11	36K858652	Knob, Control
	18C82810C03	Pot. (50K) Volume
12	40B82073D01	Switch, Slide (DPDT)
13	61A82720C01	Jewel, Pilot Light (Red)
14	61A82720C02	Jewel, Pilot Light (Grn)
15	33D83076H01	Escutcheon U/W 1 Freq. Carrier Squelch
	33D83076H10	Escutcheon U/W 1 Freq. Dual Squelch
	33D83076H08	Escutcheon U/W Multi-Freq. Dual Squelch
	33D83076H15	Escutcheon U/W Multi-Freq. Carrier Squelch
16	36K858652	Knob, Control
	18D82515B04	Pot. (2K) Squelch
17	13B82776C01	Grille, Speaker
18	33A82124B01	Nameplate

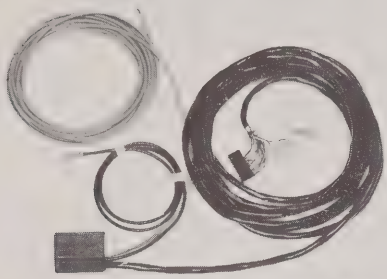
NON-REFERENCED ITEMS

50C82774C01	Speaker (3x5)
38B82775C01	Gasket, Speaker Grille
40C83161E01	Switch, Rotary (6 Pos.) For Multi-Freq.
36B82869D01	Knob, Control U/W Switch 40C83161E01
2C82360B03	Nut, Speed U/W Pilot Light Jewels
54A83697G01	Label, Polarity
54K852774	Label (±15KC)
54K863472	Label (±5 KC)
54A850440	Label (F.C.C.)
54A842366	Label (Repl. Parts)

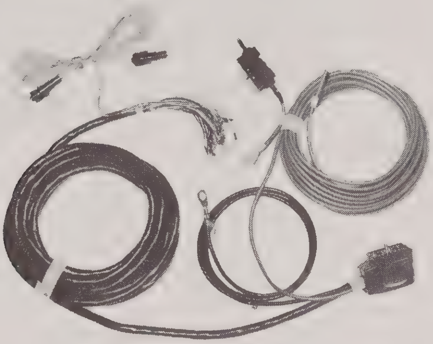




Mobile Cable Kits



TKN-6455B



TKN-6104A

TRUNK MOUNT CABLE KITS FOR "MOTRAC," "MOTRAN" AND "MOCOM-30" & 70" RADIO

MODEL NO.	DESCRIPTION
TKN 6058A	6 volt, 1 or 2 freq. 25, 30 & 50 watt units
TKN 6097A	6 volt, 1 or 2 freq. 30 & 50 watt with "Extender" feature
TKN 6105A	12-volt 1, 2, & 4 freq. 25, 30 and 50 watt units (20 foot)
TKN 6104A	12-volt 1, 2, & 4 freq. 60, 80 and 100 watt units (20 foot)
TKN 6076A	24-volt 2 freq. 25 watt units (17 foot)

"MICOR" RADIO CONTROL AND POWER CABLES

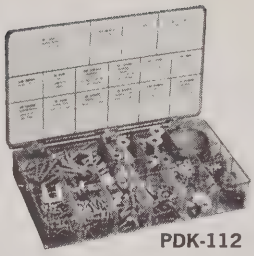
MODEL NO.	DESCRIPTION
TKN-6453B	1 freq. cable—22 feet long (replaces TKN-6452A
TKN-6455B	Multi-frequency cable—22 feet long (replaces TKN-6454A)
TKN-6456A	Control head power cable
TKN-6457A	Cable and fuse (low power radio)
TKN-6458A	Cable and fuse (high power radio)

DASH MOUNT CABLE KITS

MODEL NO.	DESCRIPTION	APPLICATION
TK 191	12-volt, 1 or 2 freq.	D43G, GGV series

CABLE KITS FOR TLN 6014A CONVERTER For U41GGT, U43GGT, U44BBT and U51GGT 18, 25, 30, 50-60 Watt Units "T-Power" Series Radio.

TKN 6013A	Trunk-mounted converter, trunk mount radio
TKN 6014A	Engine-mounted converter, dash mount radio



PDK-112

Mobile Installation Hardware Kit

Forget about lost or missing installation hardware with this time and trouble saver! Each kit contains a generous supply of all the hardware you need for mobile installations—600 pieces in all, including a handy, 13-compartment plastic case. Self-tapping screws, bolts, washers and bushings of every useful size are supplied as well as 10 microphone hang-up plates. The contents of each compartment are identified by Motorola part number and description. This kit is a "must" in the shop and in every service van. **Order PDK-112**

BUSINESS "DISPATCHER" AND 'MOCOM' RADIO CABLE KITS

MODEL NO.	DESCRIPTION
TKN 6100A	Business "Dispatcher" Radio (All Models)
28A48250	Right Angle Connector Kit used with TKN 6100A
TKN 6329A	"Mocom-10," 12-volt Low Band
TKN-6445A	"Mocom 10 & 35," 12-volt High Band & 450

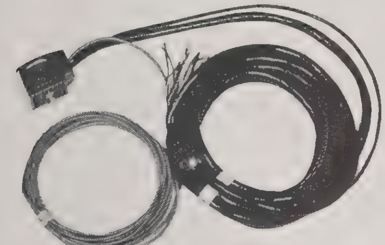
GROUND REVERSING KITS

MODEL NO.	DESCRIPTION
TLN-8482A	For "MOTRAC/MOTRAN" radio
TLN-4390A	for "MICOR" radio

VIBRATOR & DYNAMOTOR "T-POWER" RADIO CABLE KITS

MODEL NO.	REPLACEMENT FOR	DESCRIPTION	APPLICATION
TKN 6001A	TK 154, TK 202 series, TKN 6000A	6-volt, 20 ft. 1 or 2 freq.	All 6/12 450-470mc 18-20 watt
TKN 6003A	TK 156, TK 203 series, TKN 6002A	12-volt, 20 ft. 1 or 2 freq.	T51G, T51GGV series 50 to 60 watt
TKN 6005A	TK 208, TK 161 series, TKN 6004A	6-volt, 20 ft. 1 or 2 freq.	T41G, GGV series T43G, GGV series
TKN 6007A	TK 209, TK 162 series, TKN 6006A	12-volt, 20 ft. 1 or 2 freq.	U41GGT, U43GGT series 10 and 25 watt
TKN 6009A	TK 313 series	12-volt, 20 ft. 1 or 2 freq.	T43AAD, T43GAD T51GGD series T53GKT, T71GJT, "T-Power", 60 & 100 watt
TKN 6011A	TK 315 series	12-volt, 20 ft. 1 or 2 freq.	T53GAD, T61GJD 60-watt and 100-watt Dynamotor models
TKN 6101A		12-volt cable kit (17-foot) trunk mount	U53GGT 60 watt
TKN 6102A		12-volt cable kit (2-foot) dash mount	U53GGT 60 watt
TKN 6114A		12-volt cable kit (17-foot) trunk mount	T53GGT 60 watt

POWER AND CONTROL CABLE KITS



(A)
Power and Control

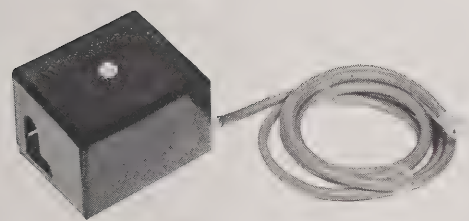
(B)
Control

(C)
Power

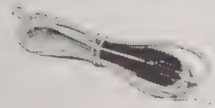
FIG.	DESCRIPTION	PART NO.
A	1 or 2 Freq. for all 6/12 or "T-Power" 10" Housings	1V80710A82 (12V)
	17 ft., 1 or 2 Freq. for 25, 30 & 50 watt "Motrac"	TKN6058A (6V)
	20 ft., 1 or 2 Freq. for 25, 30 & 50 watt "Motrac"	TKN6105A (12V)
	20 ft., 1 or 2 Freq. for 80 & 100 watt "Motrac"	1V80721A69 (12V)
	20 ft., for 24 volt "Motrac" Radio	1-80715A22 (24V)
B	20 ft., 1 or 2 Freq. for all Vibrator, 6/12 Models in 15" Housings	1V831573
	20 ft., 1 or 2 Freq. for all Dynamotor and "T-Power" Models	1V859419
C	20 ft., 1 or 2 Freq. for all T51GGV and T44A series 6/12 -Volt Models	1V831574 (6V) 1V831576 (12V)
	20 ft., 1 or 2 Freq. for 6/12-Volt Dynamotor Models and "T-Power" Mobile Units	1V865349 (6V) 1V865351 (12V)
	20 ft., 1 or 2 Freq. for 100-Watt Dynamotor Models	1V865351 (12V)

MISCELLANEOUS CABLE ASSEMBLIES

(D)



(E)

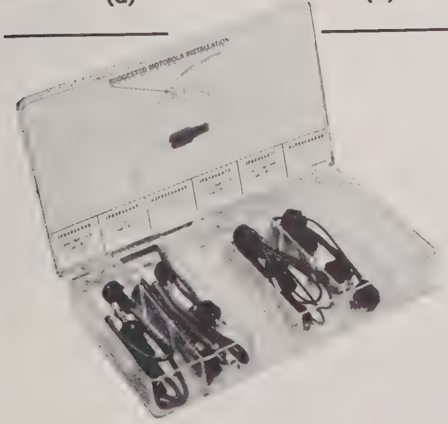


(F)

(G)

(H)

FIG.	DESCRIPTION	PART NO.
D	3 ft. Long #10GA Cable 12-Volt T43GGV and T51GGV and other similar units	1V832065
	2 ft. Long #10 blk. with ⅜" dia. lug and #8 lug	1V832063
	2 ft. Long #6 blk. with ¼" dia. lug and a ⅜" dia. lug	1V831619
E	Relay & Fuse Assembly 6- or 12-Volt (Horn type Relay)	1V859440
	Relay & Fuse Assembly 12-Volt only (Horn type Relay)	1V859445
F	In-line fused lead, 66" overall. Consists of #18 orange wire and fuse holder with 6¼ amp. fuse. Used on front mount "Motrac" radio control head.	1V80705A06
	In-line fused lead, 106" overall. Consists of #18 green wire, #19 pin one end and ring tongue lug on other. Used on rear mount "Motrac" radio control head.	1V80705A18
	In-line Fused lead w/pin #6 and Lug for Horn type Relay	1V859441
	In-line Fused lead w/pin #6 and Lug for Solenoid Relay	1V858087
	5 ft. Long #10 red with 20 amp in-line fuse and holder with a #8 lug and a ⅜" lug	1V80710A79
	67" overall in-line fuse lead #18 orange, 6¼ amp fuse. One end has a #8 ring tongue lug, the other has a #20 term pin.	1V80705A19
G	Relay lead, 68 in. long w/pin #5 and Lug 68" #20 pin lead with #8 ring tongue lug. The other has a #6 pin	1V859428 1V80710A80
H	One each of Fig. "F & G" for Horn type Relays	1V830178
	Ignition Switch Lead, 5 ft. long w/lugs	1V847414



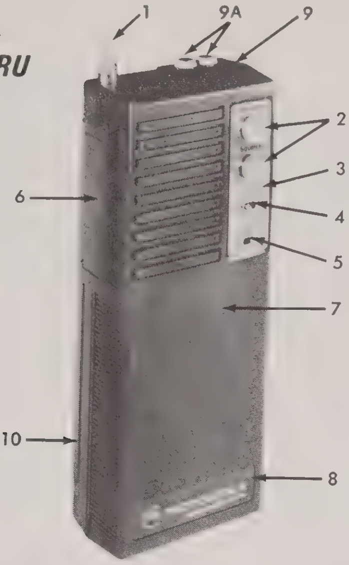
PDK-1116 Clip-On Fuse Kit.

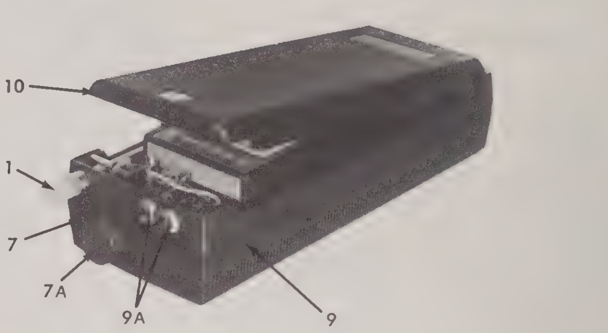
Don't rewire . . . just because part of the in-line fuse has deteriorated, and you haven't enough slack. The PDK-1116 provides you with a quick, easy method of replacing in-line fuse holders. The fuse bodies and caps have 9" leads with crimp splices on the leads. Straps are included for tieing back hanging slack. Just remove the faulty part, strip off ¼" of insulation, and crimp on the new assembly. Each PDK1116 Clip-On Fuse Kit consists of:

QUANTITY	DESCRIPTION	PART NUMBER
5	Heavy Fuse Body and Lead	1P84066A68
5	Heavy Fuse Cap and Lead	1P84066A69
5	Light Fuse Body and Lead	1P84066A70
5	Light Fuse Cap and Lead	1P84066A71
6	Panduit Straps	42P84066A60

Replacement Parts For "Handie-Com"

H21TTN, H23TTB, H23RRB & H23RRU



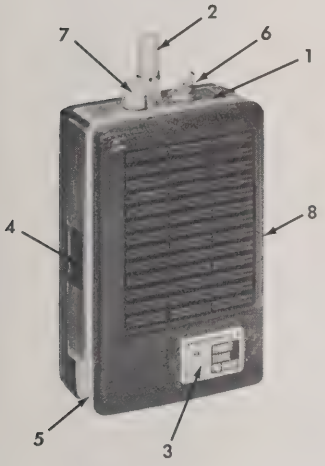


REF. SYMBOL	PART NUMBER	DESCRIPTION
1	NAB-6210A	Collapsible, antenna (low band)
	NAD-6211A	Collapsible, antenna (high band)
2	18-82265J01	Volume pot w/switch
	18-82255J01	Squelch pot (10k)
	36-82262J01	Knob (volume & squelch)
	3-82617J01	Set screw } used w/vol. squelch & freq. knobs
	4-82616J01	Washer
	2-82268J01	Nut
3	13-82271J01	Escutcheon (1 freq./C.S.)
	13-82271J05	Escutcheon (1 freq./P.L.)
	13-82271J03	Escutcheon (2 freq./C.S.)
	13-82271J07	Escutcheon (2 freq./P.L.)
	13-82271J09	Escutcheon (3 freq./P.L.)
	13-82271J11	Escutcheon (4 freq./P.L.)
4	40-82404J02	Switch toggle (2 freq.)
	40-82775J01	Switch rotary (3 & 4 freq.)
	36-82774J01	Knob (3 & 4 freq.)
5	40-82085J01	Switch toggle (P.L.)
	32-82264J01	Boot, sealing (used w/4 & 5 freq. toggle switch)
6	1-80702C22 (includes)	Assembly PTT switch 40-82191J01 PTT switch 14-82267J01 Insulator 1-80702C23 Board & term pin assembly 29-82524J01 Term pin (used on above)
	36-82328J01	PTT lever
	41-82680D03	Return spring
7	NLN-8009A	Front cover (internal spkr/mic) (C.S. & P.L.) H21 & H23
	NLN-8010A	Front cover (external mic) C.S. & P.L. H21
	NLN-8194A	Front cover (internal & external mic) (UNI. & UNI P.L.) H23
	1-80702C48	Assem Front cover riveted (Std.) (w/PTT button & spring)
	1-80702C49	Assem front cover riveted (UNI) (w/PTT button & spring)
	50-83466D04	Speaker 18 ohm (2" dia)
	14-82282J01	Insulator speaker
	42-82143J06	Clamp (cable)
	42-82163J01	Clip (speaker)
	75-82154D23	Pad (cover)
	59-82575J01	Cartridge (mic)
	35-82746J01	Diaphragm (u/w mic)
	75-82745J01	Pad (u/w mic)
	32-82744J01	Gasket (u/w mic)
	7-82743J01	Bracket (u/w mic)
	3-490352	Screw (2-56 x 5/32) (u/w mic)
	35-82258D03	Grille cloth
	9-82306J01	4 contact, Female conn. (for remote mic)
	32-82828J01	Gasket (for remote mic)
	43-82312J01	Spacer (mic. conn) (for remote mic)
	43-82304J03	Spacer (finished) (for remote mic)
	2-82295J01	Nut, spanner
7A	1-80705C27 (includes)	Cap & pad assembly 15-82480J01 cap 75-82766J01 pad
8	33-82305J01	Name plate, Logo
9	NLB-6172A	Back housing (30-40 MHz)
	NLB-6173A	Back housing (40-50 MHz)
	NLD-6346A (Includes)	Back housing (150.8-174 MHz) (H23 RRB & H23 RRU) 1-80702C47 cover & battery contact assembly riveted 32-82172J05 Gasket, housing ("O" ring type) 65-82297J01 Fuse (1A Pigtail 8AG) 3-82210E05 Screw captive (6 used) 4-82418B09 Washer, nylon (6 used) 7-82299J01 Bracket, antenna
9A	9-82684D02	Jack miniature (spkr & ant.)
	2-82653D01	Nut, spanner
	4-82418B09	(Washer, nylon
	15-83526C01	Cap, threaded (spkr & ant. jacks)
10	NLN-8016A (Includes)	Battery cover 15-82321J01 cover 3-82301J01 screw captive

NON-REFERENCED ITEMS

NLN-8002A	Nickel cadmium battery
NLN-8095A	Mercury battery
NLN-8096A	Rapid charge Ni-cad battery
NLN-8106A	Battery holder (for 10 "AA" mercury or alkaline cells.)
NLN-8104A	10 "AA" mercury cells
NLN-8105A	10 "AA" alkaline cells
NMN-6055A	Microphone, coiled cord (Uni. models)
NMN-6059A	Speaker/microphone coiled cord (uni. models)
NSN-6008A	Lapel speaker (all models)
NSN-6011A	Ear piece, with volume control (all models)
NLN-8004A	Battery charger, single unit (rapid charge) (for NLN-8096 battery)
NLN-8005A	Battery charger, single unit (for NLN-8002 battery)
NLN-8205A	Battery charger, multiple unit (for NLN-8002 battery)
NLN-8206A	Battery charger, multiple unit (rapid charge) (for NLN-8096 battery)
NLN-8207A	Rapid charger power supply (multiple unit rapid charge)
NLN-8003A	Cover, carrying case (uni. models)
NLN-8006A	Cover, carrying case (internal spkr./mic. models) (STD.)
NLN-8018A	Carrying case (all models)
NLN-8007A	Lavalier & lanyard (all models)
NLN-6349A	Carrying strap (all models)
NKN-6157A	Alignment cable kit (all models)
NAD-6219A	Antenna heliflex (150.8-162 MHz)
NAD-6220A	Antenna heliflex (162-174 MHz)

Replacement Parts HT-100 Portables



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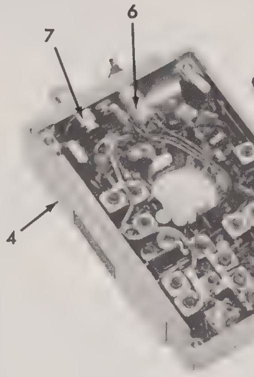

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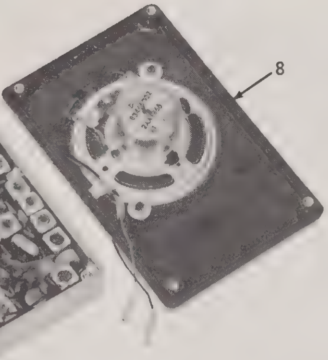
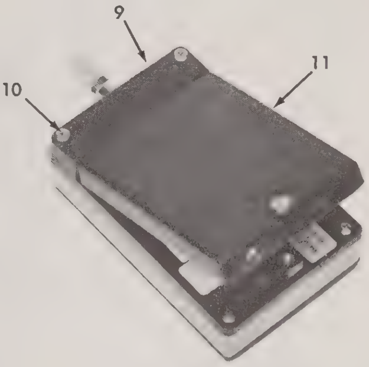


(C)

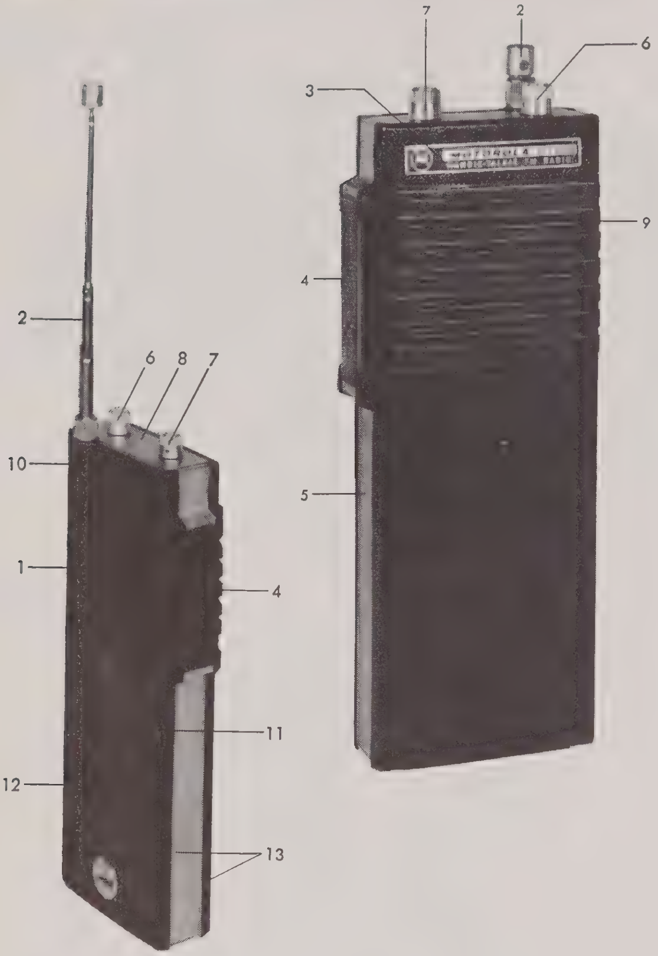


(D)

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	13C84174H01	Escutcheon (dual freq.)
	13C84174H03	Escutcheon (1 freq.)
2	——	Antenna (See Portable Accessories Section)
3	33B84176H01	Nameplate
4	1V80786A90	Assembly PTT switch (includes) 40B82159D01 switch PTT 14A83568H01 insulator switch 43B83553H01 bushing, actuator 7B83551H01 bracket, switch 5S135248 eyelet (.083 x .350)
	22B82591C05	Pin lever actuating
	41A83567H01	Spring compression
	38C83130H01	Button, sw. actuator (male)
	38C83130H02	Button, sw. actuator (female)
	43A83569H01	Sleeve switch
	41A82680D03	Spring compression
	15D84112H01	Hsng, switch button
	38C84110H01	Button, switch
	3S131990	Screw (4-40X 5/32 Phl. Flt.) (2 used)
5	7D84113H01	Frame H13FFN (1 freq. & dual freq.)
6	40B82090H02	Toggle switch (1 freq.)
	2A82653D07	Nut spanner
	2A83676D01	Nut boot
	40C83471H02	Switch rotary (4 pos.) (dual freq.)
	4A82453E01	Wshr., nylon
	2A82653D05	Nut special
	36B83573H03	Knob control
	3A83174C02	Set screw (4-40 x 3/16)
7	18C83561H02	25K volume pot
	4A82453E01	Wshr., nylon
	2A82653D03	Nut special (1/4-32)
	36B83573H01	Knob, control volume
	3A83174C02	Set screw (4-40 x 3/16)
8	NLN-6799A	Front cover assem.
	15D84115H01	Cover front
	35A82258D03	Grill cloth
	50-83564H01	Speaker (100 ohm)
	4K840914	Wshr., spring (2 used)
	4K848065	Wshr., retaining (2 used)

REF. SYMBOL	PART NUMBER	DESCRIPTION
	14B83863B03	Plastic insulator speaker shell
	42B84809H01	Clamp
	3S125347	Screw (2-56 x 3/16)
	32-82172J01	Gasket, housing (Replaces 32-84313H01)
	1V80786A81	Assem. lead & lug (Blk)
	1V80786A82	Assem. lead & lug (Blu)
	14A82392E05	Insulator 1/4" square (2 used)
	75B84656H01	Pad, rubber
9	NLN-6800B	Kit back cover (without clip)
	NLN-6812A	Kit back cover (with clip)
	1V80794A20 (includes)	Back cover riveted 15D84114H02 cover back 39B84183H01 contact/spring (2 used) 39B84305H02 contact, pin (2 used) 5S136949 rivet (.088 x 5/32) (2 used) 43B84228H03 insert antenna
	32-82172J01	Gasket, housing (Replaces 32-84313H01)
	14B84713H01	Insulator, contact pin
	14B84713H02	Insulator, contact pin
	7A84756H01	Bracket, clip mounting
	3S490865	Screw (2-56 x 3/16) (2 used)
	41A84757H01	Spring clip
	42C84758H01	Clip, pocket
	22B82395B33	Pin clip
	4S1793	Flat washer
	3S124952	Pin retainer
10	3A82210E05	Screw cover mounting (short) (2 used)
	3A82210E07	Screw cover mounting (long) (2 used)
	4C82418B09	Washer, nylon (4 used)
11	NLN-6781B	Ni-cad battery/cover (includes) 3B84182H01 lock screw 4B84339H01 "E" ring
NON-REFERENCED ITEMS		
	65B82896B03	Fuse (1.0 amp-125 Volt)
	39B83610H01	Contact, ant.
	18C82876B05	Squelch, control pot

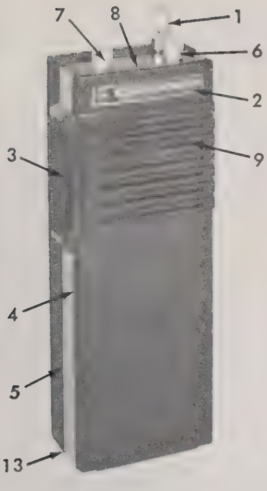
Replacement Parts HT-220 Portables

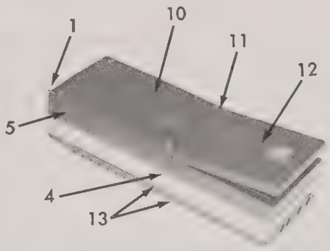


REF. SYMBOL	PART NUMBER	DESCRIPTION
1	42-82839J01	Clip pocket (Replaces 42-83531H01)
2	——	Antenna (See Portable Accessories Section)
3	33-83580H01	Name plate
4	1-80786A90	Assembly PTT Switch
	(INCLUDES)	40-82159D01 PTT Switch
		14-83568H01 Insulator Switch
		43-83553H01 Bushing Activator
		7B83551H01 Bracket Switch
		5-132248 Eyelet
	22-82591C10	Pin Lever, Actuating
	41-83567H01	Spring, Compression
	38-83130H01	Button, Switch Actuator Male
	38-83130H02	Button, Switch Actuator Female
	43-83569H01	Sleeve, Switch
	41-82680D03	Spring
4	36-83129H01	Lever, Actuating
	1-80701C36	4 Contact Conn. Assem. (For Remote Mic.) (Replaces 1-80788A77)
	64B84361H02	BrD 4 Term. (Red)
	14B84363H01	Insulator (Glass Cloth)
	43B84042H01	Bushing
	2A82653D05	Nut Special
	14B84309H03	Insulator Nylon
5	7-83124H01	Frame, H23
	7-83342H01	Frame, H23 PL
6	18-83560H01	5K Squelch Pot
	29-83549H01	Terminal
	4-82453E01	Washer, nylon
	2-82653D01	Nut, ¼-32
	36-83573H05	Knob, Control
	3-83174C02	Screw (4 x 40 x ⅛)
7	18-83561H02	25K Volume Pot
	4-82453E01	Washer, Nylon
	2-82653D03	Nut, ¼-32
	36-83573H01	Knob, Control
	3-83174C02	Screw (4 x 40 x ⅛)
8	40-83471H01	Switch, Rotary—2 Position, 2 Freq.
	2-82653D05	Nut, Special
		Standard Squelch
9	NLN-6674B*	Kit front cover (std & rapid charge bat. models) H23 & H24
	NLN-6674C	Kit front cover (std including special mic. cart.) H23
	NLN-8107A	Kit front cover (c.s. std. slim line with spkr mic) H24
		Private Line
	NLN-6680B*	Kit front cover (P.L. & rapid charge bat. models) H23 & H24
	NLN-6680C	Kit front cover (P.L. including special mic. cart.) H23
	NLN-8108A	Kit front cover (P.L. std. slim line with spkr. mic.) H24
		Remote Mic
	NLN-6681B*	Kit front cover (remote mic. & rapid charge bat. models) H23
	NLN-6681C	Kit front cover (remote mic.) H23
	NLN-8109A	Kit front cover, remote mic. (slim line) H24
		Private Line Remote Mic
	NLN-6737B*	Kit front cover (P.L. remote mic. & rapid charge bat. models) H23
	NLN-6737C	Kit front cover (P.L. remote mic.) H23
	NLN-8110A	Kit front cover (P.L. remote mic. slim line) H24
		Standard Squelch
	1-80792A10*	Assem. front cover, riveted (std. & rapid charge bat. models) H23
	1-80701C25	Assem. front cover, riveted (std) H23 & H24
		Private Line
	1-80792A12*	Assem. front cover, riveted (P.L. & rapid charge bat. models) H23
	1-80701C28	Assem. front cover, riveted (P.L.) H23-H24
		Remote Mic
	1-80792A14*	Assem. front cover, riveted (remote mic. & rapid charge bat. models) H23
	1-80701C29	Assem. front cover, riveted (remote mic.) H23-H24
		Private Line Remote Mic
	1-80792A15*	Assem. front cover, riveted (P.L. remote mic. & rapid charge bat. models) H23
	1-80701C30	Assem. front cover, riveted (P.L. remote mic.) H23-H24
	1-80792A11*	Assem. bat. contacts riveted (std., remote mic. & rapid charge bat. models) H23-H24
	1-80792A13*	Assem. bat. contacts riveted (P.L. remote mic. & rapid charge bat. models) H23-H24
	1-80701C26	Assem. mic. cart. (for std. & P.L. "C" models) H23-H24
	13C83548H04	Escutcheon (1 freq. P.L.)
	13C83548H03	Escutcheon (1 freq.)
	13C83548H01	Escutcheon (dual freq. P.L.)
	13C83548H02	Escutcheon (dual freq.)
	50-82917J02	Speaker, insulated
	14B84516H01	Insulator, speaker
	14-82282J01	Insulator, speaker (std. & P.L. special mic., for NLN-6674B, C; NLN-6680B & C)
	35A82258D03	Cloth, grille
	35-82160J01	Cloth grille (std. & P.L. spcl. mic., for NLN-6674C, NLN-6680C)
	13-82159J01	Grille, mic. (std. & P.L. spcl. mic., for NLN-6674C, NLN-6680C)
	7-82158J01	Brkt., chartridge (std. & P.L. spcl. mic., for NLN-6674C, NLN6680C)
	43-82274J01	Mic., insert (all "B" models)
	65B82896B03	Fuse, 1A-125V
	OR	
	65-82896B04	Fuse, 2A-125V
	42A83559H01	Clamp
	3S125347	Mch. Scr. (2-56 x 3/16)
	4K840914	Washer, spring (2 used)
	4K848065	Washer, retaining (2 used)
	33B83580H01	Nameplate
	1V80786A80	Assem. lead & lug (red)
	1V80786A81	Assem. lead & lug (blk)
	1V80786A82	Assem. lead & lug (blu)
10	NLN 6678A	Kit, back cover without clip (PL)
	NLN 6675A	Kit, back cover with clip (Standard)
	NLN-6679A	Kit, back cover with clip (slimline P.L.)
	NLN-6886B	Kit, back cover with clip (universal std. sq.)
	NLN-6887B	Kit, back cover with clip (universal P.L.)
	NLN-6676A	Kit, back cover without clip (standard)
	15-83131H01	Cover, back (standard)
	15-83343H01	Cover, back (P.L.)
	15-84269H02	Cover, back (universal)
	15-84511H02	Cover, back (universal P.L.)
	75A83779H01	Pad, polyurethane
	43-83578H01	Bushing, cover mounting
	7-82947C01	Bracket, clip mounting
	64-82043D01	Plate, back up
	41-83566H01	Spring, Clip
	3-136666	Mch Screw 2-56 x ¼ Phillips Flathead
	22-82395B09	Pin clip
	4-1793	Washer, screw
	3-124952	Pin, retainer
	14-82392E03	Insulator, cover
	54-83606H01	Label, model & serial
	54-83607H01	Label, frequency
11	3-82210E05	Screw cover mounting, short
	3-82210E07	Screw cover mounting, long
	4-82418B09	Washer, nylon
12	NLN 6677A	Battery cover, staked
	15-83132H02	Battery cover, only
	38B84498H01	Button, ¼ turn
	4C83799H02	Washer, insulating
	55B84499H01	Latch, ¼ turn
	75-82154D14	Pad
13	32-82172J01	Gasket housing (std., P.L. & remote mic.) (Replaces 32-84313H01 & H02, 32-82942B04 & B05)

***NOTE:** For rapid charge capability, "B" version front cover kits must be added to the radio as well as the rapid charge battery.

Replacement Parts for HT-220 Omni-Housing Portables

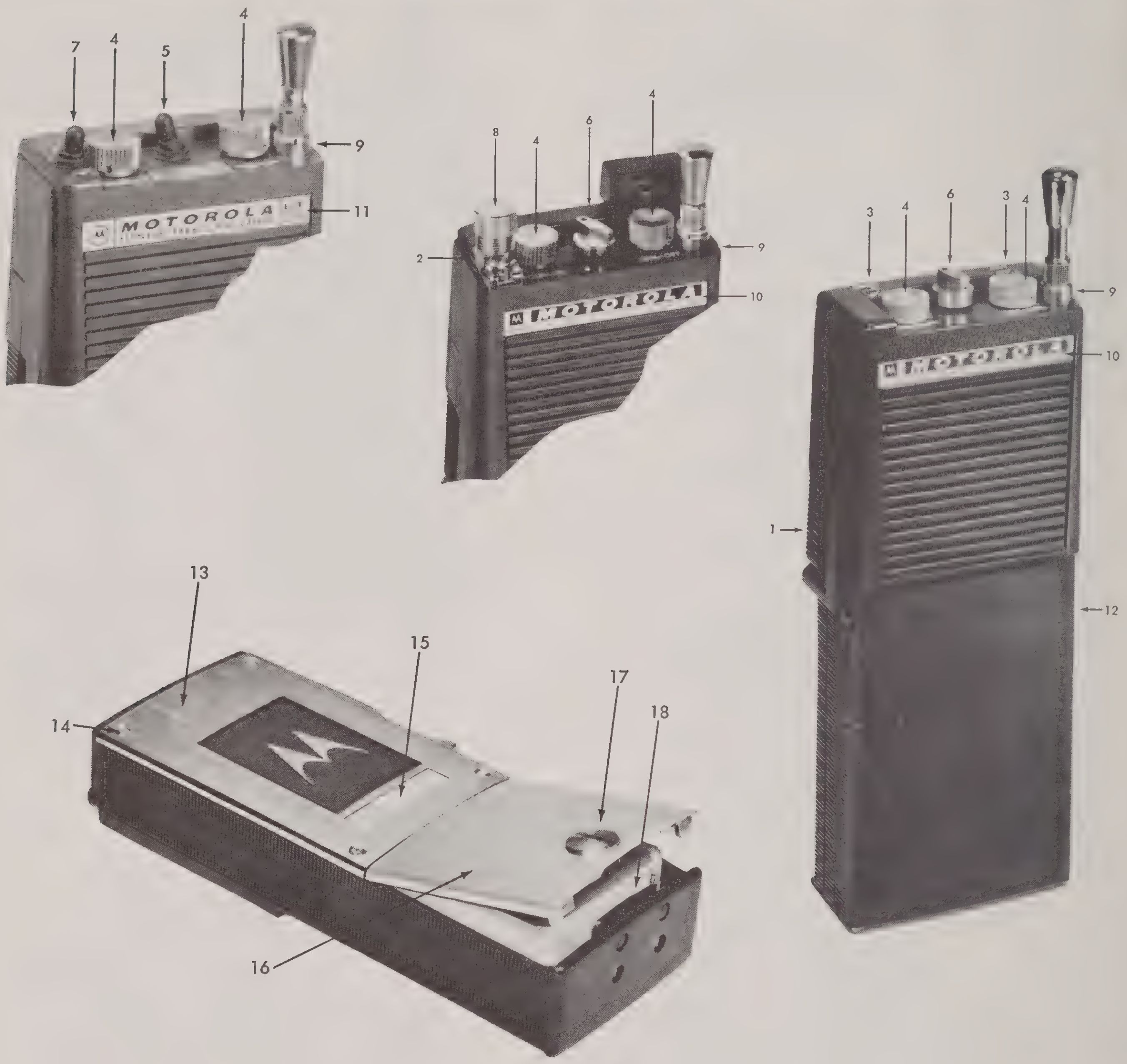




NON-REFERENCED ITEMS	
NLN-6761A	Nickel-cadmium battery kit (omni-housing) 15 volts-450 MAH
NLN-6762A	Mercury battery kit (HD) 16.2 volts (use 60-84342H01)

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	——	Antenna (See Portable Antenna Section)
2	33B83580H01	Nameplate
3	1V80786A90	Assembly PTT switch
	(includes)	40-82159D01 PTT switch
		14-83568H01 Insulator switch
		43-83552H01 Bushing activator
		7-83551H01 Bracket switch
		5-132248 Eyelet
	22B82591C10	Pin lever, actuating
	41A83567H01	Spring, compression
	38C83130H01	Button switch actuator (male)
	38C83130H02	Button switch actuator (female)
	43A83569H01	Sleeve switch
	41A82680D03	Spring
	36C83129H01	Lever, actuating
	1V80788A77	4 contact conn. assem. (for remote mic)
	64B84361H02	Brd. 4 term. (red)
	14B84363H01	Insulator (glass cloth)
	43B84042H01	Bushing
	2A82653D05	Nut special
	14B84309H03	Insulator (nylon)
4	7D83124H01	Frame H23 (Standard)
	7D83342H01	Frame H23 (P.L.)
5	NLN-6748A	Kit, frame extension (standard)
	43B84073H01	Bushing, cover mtg. (2 used)
	NLN-6749A	Kit, frame extension (P.L.)
	43B84073H01	Bushing, cover mtg. (2 used)
6	18C83560H01	5K squelch pot
	29B83549H01	Terminal
	4A82453E01	Washer, nylon
	2A83570H01	Nut special (¼-32)
	36B83573H05	Knob control
	3A83174C02	Screw (4-40 x ⅛)
7	18C83561H02	25K volume pot
	4A82453E01	Washer, nylon
	2A82563D03	Nut special (¼-32)
	36B83573H01	Knob control
	3A83174C02	Screw (4-40 x ⅛)
8	40A83471H01	Switch, rotary—2 position 2 freq.
	2A82653D05	Nut special
		Standard Squelch
9	NLN-6791B	Kit, front cover (HD) (std. & rapid charge bat. models) H23
	NLN-6791C	Kit, front cover (HD) (std. including special mic cart) H23
	NLN-8111A	Kit, front cover (HD) (cs std. OMNI with spkr. mic) H24 (1W)
	NLN-8128A	Kit, front cover (HD) (cs std. OMNI with spkr. mic) H34 (4W)
		Private Line
	NLN-6792B*	Kit, front cover (HD) (P.L. & rapid charge bat models) H23
	NLN-6792C	Kit, front cover (HD) (P.L. including special mic cart) H23
	NLN-8112A	Kit, front cover (HD) (P.L. OMNI with spkr. mic) H24 (1 w)
	NLN-8130A	Kit, front cover (HD) (P.L. OMNI with spkr. mic) H34 (4 w)
		Remote Mic
	NLN-6793B*	Kit, front cover (HD) Remote mic. & rapid charge bat model (Fuse 2.0 amps) H23
	NLN-6793C	Kit, front cover (HD) Remote mic. (Fuse 1.0 amps) H23
	NLN-8113A	Kit, front cover (HD) (remote mic. OMNI) (1 w) H24
	NLN-8129A	Kit, front cover (HD) (cs. remote mic. OMNI) (1 w) H34
		Private Line Remote Mic
	NLN-6794C	Kit, front cover (HD) (P.L. remote mic.) (1 w) H23
	NLN-8114A	Kit, front cover (HD) (P.L. remote mic OMNI) (1 w) H24
	NLN-8131A	Kit, front cover (HD) (P.L. remote mic OMNI) (4 w) H34
		Universal Standard Squelch
	NLN-6851B*	Kit, front cover (Universal c.s.) & rapid charge bat models. H23
	NLN-6851C	Kit, front cover (Universal c.s.) (including special mic cart.) H23
	NLN-8115A	Kit, front cover (HD) (Universal c.s. OMNI with spkr. mic.) (1 w) H24
	NLN-8132A	Kit, front cover (HD) (Universal c.s. OMNI with spkr. mic.) (4 w) H34
		Universal Private Line
	NLN-6856B*	Kit, front cover (Universal P.L.) & rapid charge bat models. H23
	NLN-6856C	Kit, front cover (Universal P.L. including special mic cart) H23
	NLN-8116A	Kit, front cover (HD) (Universal P.L. OMNI with spkr. mic.) (1 w) H24
	NLN-8133A	Kit, front cover (HD) (Universal P.L. OMNI with spkr. mic.) (4 w) H34
		Front Cover Assemblies
	1-80792A16*	Assem. front cover, riveted (standard & universal squelch) & rapid charge bat models. H23-H24
	1-80701C31	Assem. front cover, riveted (std. & universal P.L.) H23-H24
	1-80701C32*	Assem. front cover, riveted (P.L., universal P.L. & rapid charge bat models) H23-H24
	1-80702C75	Assem. front cover, riveted (P.L.—OMNI—std.) H34 (4 w)
	1-80792A20*	Assem. front cover, riveted (remote mic. & rapid charge bat models) H23-H24
	1-80701C33	Assem. front cover, riveted (remote mic.) H23-H24
	1-80702C74	Assem. front cover, riveted (remote mic. c.s. HD) (4 w) H34
	1-80792A21*	Assem. front cover, riveted (remote P.L. & rapid charge bat models) H23
	1-80701C34	Assem. front cover, riveted (P.L. remote mic.) H23
	1-80702C76	Assem. front cover, riveted (HD) (P.L. remote mic OMNI) (4 w) H34
	1-80792A17*	Assem. bat contacts, riveted (std., universal squelch remote & rapid charge bat models) H23-H24-H34
	1-80792A19	Assem. bat contacts, riveted (P.L., remote P.L. universal P.L. & rapid charge battery models) H23-H24-H34
	1-80701C26	Assembly mic. cart. (for std., P.L. & universal P.L. "C" suffix models) H23-H24
	13C83548H03	Escutcheon (1 freq.)
	13C83548H04	Escutcheon (1 freq. P.L.)
	13C83548H02	Escutcheon (dual freq.)
	13C83548H01	Escutcheon (dual freq. P.L.)
	50-82917J02	Speaker, insulated (replaces 50-83466D02)
	14B84516H01	Insulator, speaker ("A" suffix models)
	14-82282J01	("B" & "C" suffix models)
	35A82258D03	Cloth, grille ("A & B" suffix models)
	35-82160J01	Cloth grille (HD, std., P.L., UNI P.L. special mic. NLN-6791C, 92C, NLN-6851C & NLN-6856C)
	13-82159J01	Grille mic. (HD, std., P.L., UNI P.L. special mic. NLN-6791C, 92C, NLN-6851C & NLN-6856C)
	7-82158J01	Brkt Cartridge (HD, std., P.L., UNI P.L. special mic. NLN-6791C, 92C, NLN-6851C & NLN-6856C)
	43-82274J01	Mic insert (all "B" suffix models)
	65B82896B04	Fuse (2A-125 Volts)
	1V80786A76	Fuse holder assembly
	42A83559H01	Clamp
	3S125347	Mch. Scr. (2-56 x 3/16)
	4K840914	Washer, spring (2 used)
	4K848065	Washer, retaining (2 used)
	32B84313H01	Gasket, housing (HD) (Standard and remote mic)
	32B84313H02	Gasket, housing (HD) (P.L.)
	33B83580H01	Nameplate
	1V80786A80	Assem. lead and lug (red)
	1V80786A81	Assem. lead and lug (blk)
	1V80786A82	Assem. lead and lug (blu)
10	NLN-6750B	Kit, back cover w/o clip (HD) standard. H23
	NLN-6751B	Kit, back cover w/o clip (HD) P.L. H23
	NLN-6770B	Kit, back cover with clip (HD) standard. H24
	NLN-6771B	Kit, back cover with clip (HD) P.L. remote H24
	NLN-6848B	Kit, back cover w/o clip (HD) Uni. P.L. H23
	NLN-6852B	Kit, back cover w/o clip (HD) Uni. H23
	NLN-8134A	Kit, back cover (HD) c.s. H34
	NLN-8135A	Kit, back cover w/o clip (HD) P.L. (remote) H34
	NLN-8136A	Kit, back cover w/o clip H34
	NLN-8137A	Kit, back cover w/o clip (P.L. UNI) H34
	43B83578H01	Bushing cover mounting
	15-84015H02	Cover, back (HD) (standard) H23-H24
	15-84016H02	Cover, back (HD) (P.L.) H23-H24
	15-84269H02	Cover, back (HD) Uni. H23
	15-84511H02	Cover, back (HD) Uni. P.L. H23
	15-82405J01	Cover, back (HD) C.S. H34
	15-82406J01	Cover, back (HD) P.L. (remote) H34
	15-82407J01	Cover, back (HD) H34
	15-82408J01	Cover, back P.L. (UNI.) H34
	42-82839J01	Clip pocket (Replaces 42-83581H01)
	7A82947C01	Bracket clip mounting
	64A82043D01	Plate, back up
	41A83566H01	Spring, clip
	3S136666	Mch. Scr. 2-56 x ¼ Phillips flathead
	22B82395B09	Pin clip
	4S1793	Washer, screw
	3S124952	Pin, retainer
	14A82392E03	Insulator, cover
11	3A82210E05	Screw cover mounting (bottom) (2 used)
	3A82210E09	Screw cover mounting (top) (2 used)
	4C82418B09	Washer, nylon (4 used)
12	NLN-6752A	Battery cover (HD) staked
	15-83939H03	Cover battery (Replaces 15-83939H02)
	38B84498H01	Button, ¼ turn
	4C83799H02	Washer, insulating
	75C82154D14	Latch, ¼ turn
	55B84499H01	Pad
13	32-82172J01	Gasket housing (std., HD remote mic., P.L. & HD P.L.) (Replaces 32-84313H01 & H02)

***NOTE:** For rapid charge capability, "B" version front cover kits must be added to the radio as well as the rapid charge battery.



H21, H23, H24 DCN and DEN SERIES

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	38B82657D02	Lever, PTT
	3A82773D01	Screw, Pivot
	41A82692D01	Spring, Actuating
	41A82680D01	Spring, Coil
	43A82270E01	Seal, Switch
	2A82771D01	Nut, Switch Mounting
	1V80728A68	P.T.T. Switch Assem. used on Private Line, Internal Microphone Units only
	1-80728A68	P.T.T. Switch Assem. Used on Select Call, Internal Microphone Units only. Replaces 1-80733A32
	1V80749A50	P.T.T. Switch Used on Carrier Squelch, Internal Microphone Units Only
	1V80753A75	P.T.T. Switch Assem. Used on Carrier and Private Line Squelch, Universal Internal and External Microphone units only (Resistor 6R129753-100-¼w-10% Must be Added Between B2 and C1 Contacts of Switch)
	1V80743A22	P.T.T. Switch Assem. Used on H24DCN Series Only
	43B83953B01	Plunger, Switch U/W 1V80743A22
	1V80749A51	P.T.T. Switch Assem. W/Leads P/O 1V80749A50, 1V80753A75

REF. SYMBOL	PART NUMBER	DESCRIPTION
2	1V80782A68	Assem. Mic. Receptacle W/Leads
	1V80738A03	Assem. Mic. Receptacle W/Leads
	3-134290	2-56 x 7/16" phillips
	3-134291	2-32 x 3/4" phillips
NOT	1V80733A65	Assem. Mic. Receptacle W/Leads for NHN6093A Housing
SHOWN	28B82145D02	Mic. Receptacle Only
3	9C82684D01	Jacks, Spkr. and Ant.
	15A82688D01	Cover for Jacks (Internal)
	2A82653D01	Nut, Spcl. for Spkr. and Ant. Jacks
	4A82634E01	Washer, Metal
	4A82453E02	Washer, Teflon
	15A83526C01	Threaded Cap for Jacks (Metal)
	38A83755D01	Plastic Cap for Jacks
4	36B82681E03	Knob, Squelch
	36B82681E01	Knob, Volume
	3A83174C01	Set Screw for Knobs
	2A82653D03	Nut, Spcl. For Vol. and Squelch Controls
5	40B82089H01	Switch, Toggle (DPDT)
	2A83676D01	Nut, Seal U/with Toggle Switch
	4A82634E03	Washer, Lock U/with Toggle Switch
	40B82090H01	Switch, Toggle (SPDT)
6	40C82038G02	Switch, Rotary
	36C82659D01	Knob, Control
7	40B82383E01	Switch, Toggle (Talk-Page) On Models Prior to January 1, 1967
	40C83356E01	Switch, Toggle (Talk-Page) On Models After January 1, 1967
	15-82118J01	Guard. Replaces 15-83358E01
	32A83357E01	Gasket
	3S134291	Tapping Screw (2-32x3/4 PHL FIL)
	2A83676D01	Seal Nut
	3S134290	Machine Screw (2-56x7/16 PHL FIL)
	64A82375H03	Plate, Switch Mtg.
8	15B83045A01	Cap-Mic Connector
	75A82921D02	Cushion, Rubber U/W Mic. Connector Cap
	43-82074D01	Bushing, Antenna (3/4" thread length)
9	43B82328G01	Bushing, Antenna (3/8" thread length)
	29A82233C01	Lug, Solder U/W Antenna Bushing
	85-84874H01	Ant. Ferrule. Replaces 43-82568D01
10	13-83650B01	Escutcheon. Replaces 13-82697D01
11	13B83650B01	Escutcheon (HT200)

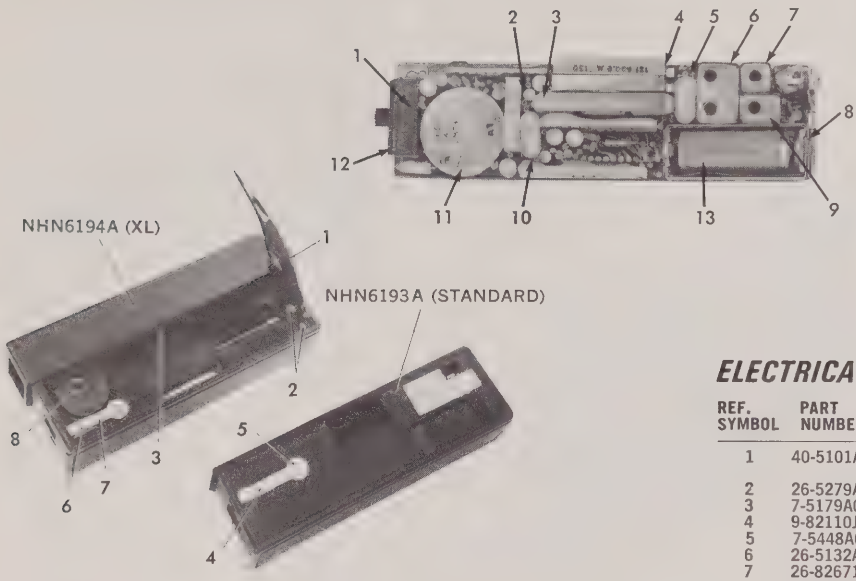
The Following 1V'S Are Housing Assem. W/Battery Contacts Only

REF. SYMBOL	PART NUMBER	DESCRIPTION
12	1V80723A28	Used with NHN6068A, NHN6068B
	1V80723A77	Used with NHN6069A, NHN6069B, NHN6082A
	1V80724A97	Used with NHN6070A, NHN6070B
	1V80724A99	Used with NHN6071A, NHN6071B
	1V80733A30	Used with NHN6090A, NHN6090B
	1V80733A35	Used with NHN6091A, NHN6092A, NHN6092B
	1V80733A60	Used with NHN6093A
	1V80738A09	Used with NHN6096A, NHN6101A, NHN6101B
	1V80738A10	Used with NHN6097A, NHN6098A, NHN6102A, NHN6102B, NHN6103A
	1V80738A75	Used with NHN6099A, NHN6104A, NHN6104B, NHN6150A
	1V80738A76	Used with NHN6105A
	1V80743A17	Used with NHN6108A
	1V80743A27	Used with NHN6110A
	1V80746A29	Used with NHN6112A
	1V80746A40	Used with NHN6113A
	1V80746A42	Used with NHN6114A
	1V80746A44	Used with NHN6115A
	1V80751A40	Used with NHN6120A
	1V80723A29	Assem. Batt. Contacts Riveted (All Models)
13	NLN6236A	Rear Cover Kit, Includes Batt. Cover (Standard Model)
	NLN6331A	Rear Cover Kit, Includes Batt. Cover (Universal and Select Call Models)
	1V80723A35	Assem. Rear Cover (Standard Model)
	1V80733A54	Assem. Rear Cover (Universal and Select Call Models)
	32A82678D01	Gasket, Cover U/W 1V80723A35
	32A82678D02	Gasket, Cover U/W 1V80733A54
	75B82154D07	Pad (2x5/8 Adhesive Back)
	75B82154D08	Pad (3 3/4x5/8 Adhesive Back)
	75B82154D09	Pad (2 5/8x5/8 Adhesive Back)
14	3A82210E01	Screw, Special
	4C82418B09	Washer
15	33A82679D01	Nameplate
16	1V80723A36	Assem. Batt. Cover
17	38B82264E01	Button, Latch
	55B82263E01	Latch
	3S1435	Mch. Scr. (2-56-1/8 Slt. Flt.)
	4C82418B10	Washer
	75A82192A01	Pad (1.25 Dia. Adhesive Back)
18	41A82394E01	Clip, Spring
	5S132372	Rivet

NON-REFERENCED ITEMS

30-82521C01	Coaxial Lead (Ant. to PTT Switch)
40C82009H01	Switch, Slide (Internal) Universal Models
64B83480A01	Plate, Switch Mounting U/W 40C82009H01
50C82162D01	Microphone
75A82153D01	Pad, Adhesive Back (Square U/W Mic)
75B82154D01	Pad, Adhesive Back (1 1/8 x .60)
35A82654D01	Diaphragm U/W Mic.
43A82685D01	Spacer U/W Mic.
15B82651D01	Cover, Pltd. U/W Mic.
50D82660D01	Speaker (2 1/4")
14A82433E01	Insulator, Spkr.
42A82652D01	Clamp, Spkr.
42A82652D03	Clamp, Spkr.
42B83455D01	Clamp, Spkr.
3S1438	Machine Screw (2-56x3/16 Slt. Flt.) U/W Spkr. Clamps
3S7209	Machine Screw (6-32x1/8 Slt. Flt.)
64A82523E01	Plate, Tapped U/W Mic. Recpt. Bracket
32A82772E01	Gasket, U/W Mic. Recept. Plate
3S490765	Machine Screw (6-32x7/16 Slt. Bin.)
4S9795	Lock Washer, Split (#6)
14B82643E04	Insulator 1.12x1.12) Armite, Adhesive Back
14B82643E13	Insulator (.420x2.75) Armite, Adhesive Back
3S115613	Machine Screw (4-40x1/4 Slt. Bin.)
2S131865	Nut (1/4-28x3/8 Hex)
3S136049	Machine Screw (2-56x5/8 Phl. Fil.)
3S2902	Machine Screw (2-56x3/16 Slt. Bin.)
3S134243	Tapping Screw (#2x5/16 Slt. Pan.)
3S125347	Tapping Screw (#2x3/16 Slt. Pan.)
4S115361	Lock Washer, Split (#2)
3S135369	Tapping Screw (0-48x3/16 Slt. Pan.)
29S129883	Lug, Soldering (#6)
65B82896B03	Fuse, Miniature (1 Amp-125V)

Replacement Parts
Radio Pagers



Pageboy II Radio Pager Replacement Parts. A03 DNC and CAC Tone and Voice and Tone Only Pagers

HOUSING AND COVER KITS

REF. SYMBOL	PART NUMBER	DESCRIPTION
	NHN-6193A	Housing kit, (standard) tone and voice
	NHN-6205A	Same as above except for tone only
	NHN-6194A	Housing kit, extra loud (tone and voice)
	15-5106A01	Housing only (standard) tone and voice
	15-5241A01	Same as above except for tone only
1	14-5138A01	Insulator, flap board tone and voice
	14-5242A01	Same as above except for tone only
2	5-490321	Rivet charging contact, tone and voice
	5-136949	Same as above except for tone only
	4-138322	Washer, charging contact for both tone and voice and tone only pager
3	75-5129A01	Pad resilient (.17 x .98)
	75-5129A02	Same as above except (.32 x 1.42)
	75-5129A03	Same as above except (.32 x .78)
4	55-5143A01	Latch, spring
5	5-115655	Rivet (.088 x 7/64″)
6	41-5122A01	Spring reinforcing
7	41-5123A01	Spring support
8	32-5128A01	Gasket transducer (tone and voice)
	32-5325A01	Same as above except for tone only

NON-REFERENCED ITEMS

	PART NUMBER	DESCRIPTION
	66-5134A01	Key cover release tool for both tone and voice and tone only
MOTOROLA		
	NLN-6971A	Cover and clip (Motorola) tone and voice
	NLN-8279A	Same as above except for tone only
INCLUDES		
	15-5135A01	Cover (Motorola) tone and voice
	15-5137A01	Same as above except for tone only
	41-5120A01	Spring clip (for both tone and voice and tone only)
	22-854109	Tapered roll pin (for both tone and voice and tone only)
	7-5119A01	Bracket cover tone and voice
	7-5620A01	Same as above except for tone only
	75-5214A01	Pad clip (tone and voice)
	75-5510A01	Same as above except for tone only
	42-5137A01	Clip pocket (Motorola) for both tone and voice and tone only
GENERAL TELEPHONE		
	NLN-6975A	Cover and clip (General Telephone) tone and voice
	NLN-8280A	Same as above except for tone only
INCLUDES		
	15-5135A08	Cover (General Telephone) tone and voice
	1-5952A19	Same as above except for tone only
	42-5137A03	Clip pocket (General Telephone) for both tone and voice and tone only
BELLBOY		
	NLN-8230A	Cover and clip (Bellboy) tone and voice
	NLN-8281A	Same as above except for tone only
INCLUDES		
	15-5135A09	Cover (Bellboy) tone and voice
	1-5952A17	Same as above except for tone only
	42-5137A05	Clip pocket (Bellboy) for both tone and voice and tone only

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ELECTRICAL COMPONENTS

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	40-5101A01	Switch (on-off push to listen) for both tone and voice and tone only
2	26-5279A01	Shield (module A3)
3	7-5179A01	Boot (crystal triple)
4	9-82110J01	Socket filter (for both tone and voice and tone only)
5	7-5448A01	Boot (crystal single)
6	26-5132A01	Shield coil (L4, L5)
7	26-82671D23	Shield coil (L3)
8	1-5950A07	Battery holder assem. (tone and voice)
	1-5950A38	Same as above except for tone only
9	26-5133A01	Shield coil (L2)
10	7-5196A01	Boot (crystal single)
11	50-5121A01	Transducer (tone and voice)
	50-5131A01	Same as above except for tone only
12	32-5131A01	Seal, dust switch

BATTERY KITS

REF. SYMBOL	PART NUMBER	DESCRIPTION
13	60-5104A01	Battery, nickel-cadmium (replaces NLN-6965A) (Tone and voice only)
	NLN-8276A	Same as above except for tone only
	1-5953A16	Adaptor for above battery NLN-8276A
	60-82168J01	Battery, Mercury (replaces NLN-6199A) (Tone and voice only)
	60-5930A01	Same as above except for tone only (replaces NLN-8277A)
	60-5310A01	Battery alkaline (for tone only) (Replaces NLN-8278A)

OPTIONS:

FOR A03 DNC (TONE AND VOICE AND TONE ONLY PAGERS)

PART NUMBER	DESCRIPTION
NLN-6962A	Tone timing kit (tone only)
NLN-8415A	Tone and voice timing kit (tone and voice)
NLN-8468A	Tone timing manual reset kit (tone only)
NLN-6963A	Tone subaudible timing kit (tone only)
NLN-8469A	Tone subaudible timing manual reset kit (tone only)
NLN-6959A	Group call decoder (tone and voice and tone only)
NLN-6960A	"Mem-O-Lert" kit (tone only)
NLN-8229A	"Mem-O-Lert" kit (tone and voice)
NLN-8414A	Tone and voice subaudible kit (tone and voice)
NLN-8416A	Tone and voice auto listen kit (tone and voice)
NLN-8467A	Auto-listen push-to-reset kit (tone and voice)
NLN-6982A	Nameplate and coding label kit (tone only)
NLN-6964A	Nameplate and coding label kit (tone and voice)

OPTIONS:

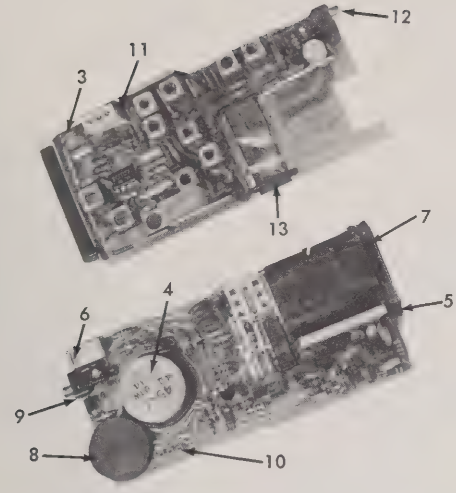
FOR A03 CAC TONE ONLY PAGERS

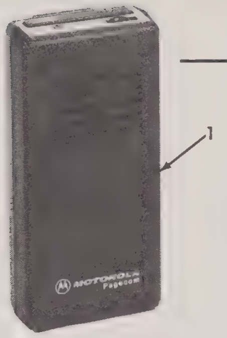
PART NUMBER	DESCRIPTION
NLN-8492A	Manual reset kit (normal and subaudio)
NLN-8497A	"Mem-O-Lert" (subaudio)
NLN-8272A	"Mem-O-Lert" (normal coding)
NLN-8273A	Battery saver (normal coding)
NLN-8274A	Tone timing (normal coding)
NLN-8275A	Tone timing (subaudio)
NLN-8473A	Tuning tool kit

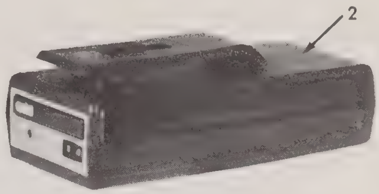
ACCESSORIES:

(PAGEBOY II)

PART NUMBER	DESCRIPTION
NLN-6969A	Acoustical coupler kit
NLN-6967A	Vehicular charger
NLN-6966A	Single unit charger (117V ac)
NLN-8238A	Single unit charger (230V ac)
NLN-8086A	Multi-charger master
NLN-8087A	Multi-charger auxiliary
NLN-6968A	Alignment tool
NLN-8412A	Multiple unit charger-master 50-60 Hertz, 110/220V
NLN-8413A	Multiple unit charger, auxiliary
TEK-49	Radiation test fixture
TEKA-83	Audio adapter kit
1-84203D32	Interconnect cable
15-84203D33	Alignment cover







Replacement Parts For "Page-Com"

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	NHN-6203A	Front housing, complete (tone and voice)
	NHN-6204A	Same as NHN-6203A above except for tone only
	15-82867J01	Front housing only (for all models)
	13-82869J01	Escutcheon (tone and voice)
	13-82976J01	Same as 13-82869J01 above except for tone only
	54-865436	Label FCC
	33-82943J01	Nameplate
	13-868710	Decal, patent number
2	NLN-8249A	Back cover, complete (for all models)
	15-82868J01	Cover only
	1-80706C32	Clip assembly, complete
	22-10133A15	Roll pin
	41-82974J01	Spring, clip
3	7-82861J01	Bracket, support
	38-82866J01	Button, push
	38-82865J01	Button, cap
4	1-80706C95	Speaker and retainer (for all models)
	50-5754A01	Speaker only
5	1-83072J01	Switch (on-off)
6	40-82888J01	Switch, reset/push-to-listen
7	1-80706C35	Battery housing
8	18-82873J01	Volume control
9	9-82862J01	Speaker jack
10	29-10231A03	Terminal board interconnects
11	1-80706C41	Receptacle plug (for above)
12	9-82862J01	Antenna jack
13	1-80706C42	Antenna assembly

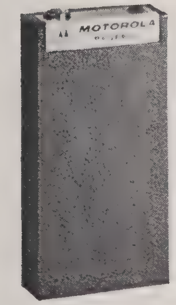
BATTERY KITS

60-5104A01	Battery, nickel-cadmium (for all models)
60-82168A01	Battery, Mercury (for all models)
NLN-8253A	FM (factory mutual) approved nickel-cadmium battery

ACCESSORIES

NSN-6015A	Lapel speaker with cord
NDD-6000A	Rain-gutter mount antenna
NKN-6065A	Antenna Adapter Cable
NLN-6959A	Group call decoder kit
NLN-8252A	Desk top charger—single unit, 50-60 Hertz 110V
NLN-8411A	Same as above except for 50-60 Hertz 220V

Replacement Parts—Radio Pagers



ELECTRICAL COMPONENTS

PART NO.	DESCRIPTION	USED ON MODEL *
NLN-6763A	Assem. Battery Retainer Replaces 1-80746A61	(* #1, #1A, #2, #3, #4)
1V80748A64	Assem. Battery Contact & Spring	(* #2, #4)
1V80757A41	Assem. Battery Contact & Spring	(* #1, #1A)
50C83154B01	Speaker	(* #2, #4)
50C83883A01	Speaker	(* #1, #1A, #3)
40C83270B01	Switch, Push	(* #2, #4)
40-83725H01	Switch, Push To Stop Replaces 40-83778A01	(* #1, #1A, #3)
40-83724H02	Switch, Slide On-Off	(* #1, #1A, #3)
9C82939C01	Jack, Micro	(* #2, #4)

MISCELLANEOUS COMPONENTS

15A83776A01	Cover, Code Number	(* #1, #1A, #2, #3, #4)
54C83157B01	Card, Code Number	(* #1, #1A, #2, #3, #4)
38B83541C01	Push Button	(* #2, #4)
43B83151B01	Bushing, Button	(* #2, #4)
33B83855B01	Nameplate	(* #1, #1A, #2, #3, #4)
36B82942C01	Knob	(* #2, #4)
3A82864A03	Screw, Hex u/w Knob	(* #2, #4)
3S115043	Drive Screw u/w Clip	(* #1, #1A, #2, #3, #4)
22B82395B21	Pin u/w Clip	(* #1, #1A, #2, #3, #4)
41A83136C01	Spring u/w Pocket Clip	(* #1, #1A, #2, #3, #4)
75B82206D01	Rubber Insert u/w Clip	(* #1, #1A, #2, #4)

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HOUSINGS AND COVERS

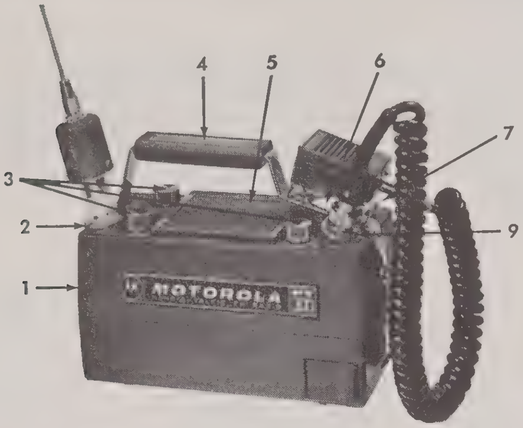
PART NO.	DESCRIPTION	USED ON MODEL *
1V80748A63	Assem. Housing w/Battery Sleeve	(* #2, #4)
1V80768A98	Assem. Housing Cover & Clip	(* #2, #4)
15-83476H03	Housing	(* #1, #1A, #3)
1-80788A99	Assem. Housing Cover Replaces 1-80746A59	(* #1, #1A)
1-80789A02	Assem. Housing Cover & Clip	(* #3)
1V80746A60	Assem. Reed Access Cover	(* #1, #1A)
1-80746A60	Assem. Reed Access Cover Replaces 1-80754A55	(* #3)

ESCUTCHEONS AND POCKET CLIPS

13B83034E01	Escutcheon-Bellboy	(* #1)
13-84232H02	Escutcheon-Pacific No. West Replaces 13-83035E01	(* #1)
13B83036E01	Escutcheon-Gen. Tel.	(* #1)
13B83037E01	Escutcheon-Pageboy	(* #1A, #3)
13B83143B01	Escutcheon-VHF Pager	(* #2, #4)
42C83644E01	Clip, Pocket-Bellboy-Pacifiç No. West	(* #1)
42C83644E03	Clip, Pocket-Pageboy-VHF Pager	(* #1A, #2, #3, #4)
42C83644E05	Clip, Pocket-Gen. Tel.	(* #1)
2A83767A01	Nut, u/w Push to Stop Switch	(* #1, #1A, #3)
3A83991D01	Screw, Cover	(* #1, #1A)
3A83990D01	Screw, Cover	(* #3)
3A83992D01	Screw, Cover	(* #2, #4)
4A83210C01	Washer, Retaining	(* #1, #1A, #3)
4S1793	Flat Washer u/w Clip	(* #1, #1A, #2, #3, #4)
4K840914	Washer, Spring	(* #2, #4)
4K848065	Washer, Retainer	(* #2, #4)
4K840894	Washer E Spring	(* #4)
41A83333D01	Spring, Switch MTG.	(* #1, #1A, #3)
41A83156B01	Spring, Compression	(* #2, #4)
42A83495B01	Clamp, Cable	(* #2, #4)
7A83209C01	Bracket, Clamp	(* #1, #1A)
42A83918A01	Clamp, Cable	(* #3)
14A82392E01	Insulator, Cover	(* #1, #1A, #2, #3, #4)

*USED ON HOUSING NO.	MODEL
#1-NHN6131BL & BH	N1010, 11 A & AV Series-Bellboy
#1A-NHN6131A	N1074, 75 A & AV Series-Pageboy
#2-NHN6144A	H03 BNC 1000 AQ & BQ Series-VHF Pager
#3-NHN6146A	N1070, 71, 72, 73, 80, 81, 82, 83 A & AV Series-Pageboy
#4-NHN6157A	H03 BNC 1104, 5, 6, 7 AQ Series-VHF Pager

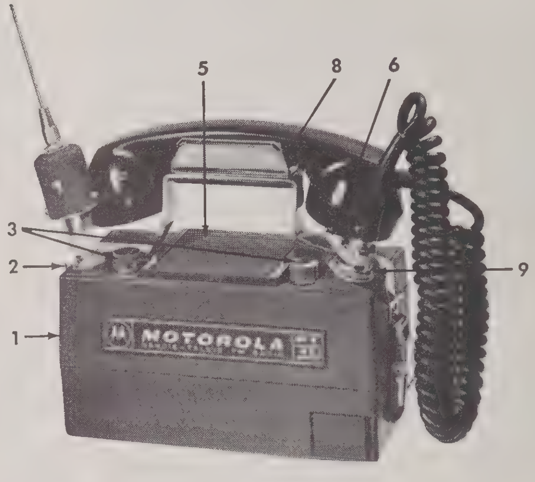
PT 200/300/400 Series Portable "Handie-Talkie" Replacement Parts



REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1V80749A97	Assem. Housing W/Handle U/W NCN6039B, 45B
	1V80749A98	Assem. Housing W/Handle U/W NCN6040B, 41B, 42B, 43B, 46B, 47B, 48B, 49B, 50B, 51B, 58B
	1V80727A11	Assem. Handle only for Above
	1V80753A76	Assem. Housing W/Handle U/W NCN6044B, 56B
	1V80753A77	Assem. Housing W/Handle U/W NCN6052B, 53B, 54B, 55B, 57B, 59B, 60B, 61B, 65B
	1V80729A93	Assem. Handle only For Above
	1V80750A96	Assem. Housing W/Handle U/W NCN6067A
	1V80751A08	Assem. Housing W/Handle U/W NCN6068A, 69A, 70A
	1V80750A97	Assem. Handle Only For Above
	1V80751A15	Assem. Housing W/Handle U/W NCN6071A
	1V80751A19	Assem. Housing W/Handle U/W NCN6072A, 73A, 74A
	1V80751A16	Assem. Handle Only For Above
2	9C82817E01	Receptacle, Antenna
	1V80730A93	Assem. Plate, For Ant. Connector Mtg.
3	36B82812E01	Knob W/Dot (Less set screw)
	36B82812E03	Knob Less Dot (Less set screw)
	3A83174C01	Set Screw
4	33B82516G01	Nameplate
5	13C82815E01	Grille U/W 1 Freq. Standard Squelch Units
	13C82815E04	Grille U/W 2 Freq. Standard Squelch Units
	13C82815E03	Grille U/W 1 Freq. Dual Squelch Units
	13C82815E02	Grille U/W 2 Freq. Dual Squelch Units
	32B82804E01	Gasket, Speaker
	35B82803E01	Grille Cloth
6	38B82807E01	Button (Push On-Off)
	3S132717	Machine Screw (3-48x5/32 Slt Bin
	4S400149	Lock Washer (#3 Spt Lt)
	40B82851E01	Switch, Toggle (On-Off)
7	42C82811E01	Holder, Mic.
8	33B82523G01	Nameplate
9	1V80715A85	Assem. Connector 4 Pin Female (potted)

NON-REFERENCED ITEMS

18C82816E01	Pot. (5K) Squelch
18C82816E02	Pot. (10K) Volume
40C82843E01	Switch, Rotary (2 Pole 2 Pos.)
40C82891E01	Switch, Rotary (3 Pole 4 Pos.) Also replaces 2 pole, 4 pos. 40-82890E01
42K861179	Clamp, Cable
43A82896A01	Bushing, Waterproof Seal
4C82418B15	Washer, Insulating



PART NUMBER	DESCRIPTION
3S7362	Machine Screw (6-32 x ½ Slt Bin)
3S7164	Machine Screw (6-32 x ¼ Slt Bin)
3S1437	Machine Screw (4-40 x ⅝ Slt Bin)
3S129073	Machine Screw (2-56 x ¼ Slt Bin)
2S8365	Nut (¼-32 x ⅜ Hex)
2A482070	Nut, Ring

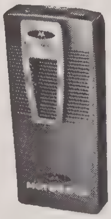
POWER SUPPLIES

PART NUMBER	DESCRIPTION
	NPN6030B
1V80731A83	Assem. Housing Riveted
1V80731A84	Assem. Batt. Holder (Complete)
1V80731A86	Assem. Batt. Cover (Complete)
65S20404	Fuse (3A-250V)
47A102105	Pin, Cross
46A82155H01	Stud, Oval Head
38A83512C01	Button, Fuse
	NPN6031A
1V80731A01	Assem. Housing Riveted
64B82653G01	Plate, Door
41A82652G01	Spring, Torsion
22A82651G01	Pin, Pivot
65A82496G01	Fuse (3A-32V)
28A82488G01	Connector, Male (2 Contact)
	NPN6033A
1V80735A56	Assem. Housing Riveted
1V80735A57	Assem. Batt. Holder (Complete)
1V80735A59	Assem. Batt. Cover (Complete)
	NPN6036A
1V80750A86	Assem. Housing Riveted
1V80750A87	Assem. Batt. Holder (Complete)
65S52293	Fuse (5 Amp.)
	NPN6038A
1V80759A96	Assem. Housing Riveted
64B82653G01	Plate, Door
65S122345	Fuse (5A-32V)

LF Pagers, Pocket Transmitter and Receiver

A

B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LOW FREQUENCY PAGER REPLACEMENT PARTS AND KITS

Replacement Housings & Parts

Housing Conversion Kit Fig. A—Contains new housing and clip to convert old style housing. Features simple replacement of batteries without removing housing. NEN6013A

Mercury battery models—NHN6026A
For nickel cadmium battery models—NHN6030A
Metal cover (For top of unit)—15K82218B01
Housing only (less clip) 15C858284
Clip, pocket—42B82820A03
Spring, for clip—41A865735
Pin, clip—22A82395B01
Battery Retainer I-84306A68

Housing Kit—(Fig. B) Clip-on cover complete—NHN6185A

Housing Kit—(Fig. C) Clip-on housing complete—NHN-6186A

Riveted housing assembly for Fig. B or Fig. C.—1-80717A48

Housing and clip assembly for Fig. C.—1-80717A50

Cover and Clip 1V80717A47 for Fig. B
Cover only 15C82945C01 for Fig. B or Fig. C
Clip only 42B83644E03
Clip spring 41A82948C01
Pin, clip 22B82395B07
Push Button 38B82950C01
Battery Retainer 38B82943C01

POCKET RECEIVER REPLACEMENT HOUSINGS AND COVERS

H01 & H03 ANC 1000A, 1100A

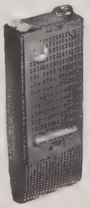
PART NO.	DESCRIPTION
1V 865173	Housing, front
1V 80708A43	Hinged cover & clip
1V 80708A44	Hinged cover less clip

H01 & H03 ANC
1000B; 1102B, 1000C, 1002B

PART NO.	DESCRIPTION
1V 80700A08	Housing, front
1V 80700A09	Hinged cover & clip
1V 80700A10	Hinged cover less clip

H01 & H03 ANC
1000AQ, 1100AQ, 1002AQ, 1102AQ

PART NO.	DESCRIPTION
1V 80700A02	Housing, front
1V 80700A04	Hinged cover & clip
1V 80700A05	Hinged cover less clip



Lapel Speakers and Ear Pieces

PART NO.	DESCRIPTION
50-865340	Speaker for NSN 6000B & NSN 6003A.
50-82320C01	Speaker for NSN 6005A.
30-82203A01	Cable & plug for NSN 6003A & NSN 6005A.
30-82533J01	Cable & plug for NSN-6008A. Replaces 30-82580D02.
NSN 6006A	Lapel Speaker with cord for current L.F. Pager
NSN 6002A	Lapel Speaker with cord for early models L.F. Pager
50-82202A03	Ear Piece with cord for current L.F. Pager (replaces NSN-6007A)
30B82203A01	Cable and Plug for NSN 6002A
50C82419C01	Lapel Speaker for NSN 6002A
30B82580D02	Cable and Plug for NSN 6006A
50C82139D01	Lapel Speaker for NSN 6006A
50-864045	Earpiece only for NSN 6001A & NSN 6004A.
42-850709	Ear clip only for NSN 6001A & NSN 6004A.
50-82202A02	Cable & volume control for NSN 6004A.

Batteries

4 Volt mercury battery for earlier versions of low frequency pager receiver. Order 60K868967

Kit of 10 Ea. 4 volt battery. Order Kit #NK149

4 volt nickel cadmium battery earlier versions of low frequency pager receivers. Order 60C82179B01

1.4 volt mercury battery (Duracell type 9R81) for current versions of low frequency pager consists of 1 battery. Order 60-82168J01

Kit of 20, 1.4 Volt mercury batteries. Order Kit #NEN6034A

1.5 volt carbon zinc battery kit consists of 1 battery type 904 or NE or 716 (Replaces NEN-6030A). Order 60-855262

Battery Conversion Kit, To convert NRA series (Fig. A) to Nicad battery operation. Order battery retainer 1-84306A68 separately.
Order 60-82179B01 Nickel cadmium (4 Volt)
Order 1-84306A68 battery retainer

POCKET TRANSMITTER REPLACEMENT HOUSINGS AND COVERS

H11, 13 NBC

Replacement housing with internal wiring only (less switch).

PART NO.	DESCRIPTION
1V 80725A60	1-freq. Standard squelch
1V 80725A64	"Private-Line" radio 132-174 MHz
NLN 6124A	Back Cover
NLN 6125A	Back Cover w/clip

Kits for HOODNC Series Receiver

NHN-6185A	Housing (back clip)
NHN-6186A	Housing (front clip)
NHN-6187A	Housing (back clip, hosp.)
NHN-6188A	Housing (back clip for 149-625 kHz models)
NAA-6025A	Antenna 60 kHz
NAA-6026A	Ant. 70.875 kHz
NAA-6027A	Ant. 100 kHz
NAA-6028A	Ant. 102.375 kHz
NAA-6030A	Ant. 149.625 kHz
60-82186J01	Mercury bat. (replaces NLN-6199A and 60-82936C01)

Portable Charger Cross Reference Chart

CHARGER MODEL	SLOTS	RADIO TYPE	BATTERY TYPE	CHARGE BATTERY IN RADIO	CHARGE BATTERY ONLY	COMMENTS
NLN1067A	1	Tone Page Boy Bell	*NLN6394A NLN6810A	Yes	*Yes	*Battery Adapter NLN6395A 16/27 ma. charge @ 2.6 v.
NLN1068A	1	Tone Page Boy Gen. Tel.	*NLN6394A NLN6810A	Yes	*Yes	*Battery Adapter NLN6395A 16/27 ma. charge @ 2.6 v.
NLN1069A	1	Tone Page Boy Motorola	*NLN6394A NLN6810A	Yes	*Yes	*Battery Adapter NLN6395A 16/27 ma. charge @ 2.6 v.
NLN1093A	1	Page Boy II	NLN6965	Yes	Yes	117 v. General Tel.
NLN1094A	1	Page Boy II	NLN6965	Yes	Yes	117 v. Motorola
NLN1096A	1	Page Boy II	NLN6965	Yes	Yes	117 v. Bellboy
NLN6011A	5	Handie Talkie Pocket Receiver	NLN6012A	Yes	No	Master 102 @ 8.5 ma.
NLN6029A	4 Batt.	Handie-Talkie Radio Phones	NK127	Yes	Yes	Charger Switch Position Cable Kit Switch Position Charging Current
		Handie-Talkie Radio Phones	NLN6134A	No	Yes	Charge Normal 50 ma. High 210 ma.
		Handie-Talkie Radio Phones	NLN6267A	Yes, use cable kit NKN6079A	Yes	Trickle Normal 25 ms. High 50 ma.
		PRC	CLN6097A	Yes*	Yes**	*requires CKN 6009A Cable Kit **requires NKN6111A Cable Kit
NLN6060A	5	Handie-Talkie Pocket Receiver	NLN6012A	Yes	No	Aux. (use w/NLN6011A) 3 max.
NLN6079A	26	Handie-Talkie Pocket Receiver	NLN6012A	No	Yes	10 v. @ 8.5 ma.
NLN6102A	1	Handie-Talkie Pagers	NLN6099A	Yes	No	11 ma.
NLN6104A	1	Receiver	NLN6099A	Yes	No	10 v. @ 8.5 ma.
NLN6118A	5	Master for Xmtrs.	NLN6117A	Yes	No	Master 16 v. @ 12 ma.
NLN6120A	24	Handie-Talkie Pocket Xmtrs.	NLN6117A	No	Yes	12 ma.
NLN6121A	1	Transmitter	NLN6117A	Yes	No	16 v. 12 ma.
NLN6259A	1	HT 200's	NLN6238A	Yes	Yes	Trickle—3 ma. Charge 20/61 ma. (LT/H. Duty)
NLN6259B	1	HT 200's	NLN6238A NLN6607A	Yes	Yes	For NLN6607A use 65-82010C04, #1819 charging lamp.
NLN6260A	12	HT 200's	NLN6238A NLN6607A	Yes	Yes	Trickle—3 ma. Charge 20/61 ma. (Lt./H. Duty)
NLN6260B	12	H21, 3, 4 DCN Z13, 14 ULN	NLN6238A NLN6607A	Yes Yes	Yes Yes	Trickle—3 ma. Charge 20 ma. Trickle—3 ma. Charge 61 ma.
NLN6270A	1	P21, 23, 31 & 33 DDC Series	NLN6267A	Yes	No	Charge 66 ma. Trickle 15 ma. Vehicular.
NLN6302A	1	Bellboy	NLN6394A	Yes	*Yes	*NLN6395A Adapter Required. 14 ma.
NLN6325A	12	Handie-Talkie H21, 23 DCN	NLN6238A	Yes	Yes	Charge 61 ma. or 20 ma. Trickle 3 ma.
NLN6354A	1	"HT" 200	NLN6238	Yes	No	Trickle 4.4 ma. Charge 28 ma. Vehicular.
NLN6418A	1	P43DEN	NPN1006A	Yes	Yes w/Cable	Charge 150 ma. Trickle 10 ma.
NLN6432A	1	Tone & Voice Pageboy	NLN6431A NLN6811A	Yes	*Yes	*Battery Adapter NLN6433A 14 ma. Charge @ 3.9 v.
NLN6432B	1	Tone & Voice Pageboy	*NLN6431A NLN6811A	Yes	*Yes	*Battery Adapter NLN6433B 14/37 ma. Charge @ 3.9 v.
NLN6445A	1	Tone Pageboy	*NLN6394A NLN6810A	Yes	*Yes	*Battery Adapter NLN6395A 14 ma. or 17 ma. Charge @ 2.6 v.
NLN6445B	1	Tone Pageboy	*NLN6394A NLN6810A	Yes	*Yes	*Battery Adapter NLN6395A 16/27 ma. Charge @ 2.6 v.
NLN6455A	5	Tone & Voice Pageboy	*NLN6431A	Yes	*Yes	Master *Battery Adapter NLN6433A 2-3 ma. Trickle and 14 ma. Charge.
NLN6459A	5	Tone & Voice Pageboy	*NLN6431A	Yes	*Yes	Auxiliary *Battery Adapter NLN6433A 2-3 ma. Trickle and 14 ma. Charge.
NLN6474A	1	P21, 23, 31, 33 DDC, P21, 31 DDN P23, 33 DEN & P33 TAC Series	NLN6267A w/NPN1007A Power Supply	Yes	Yes	Charge 66 ma. Trickle 15 ma.
NLN6480A	4	PT200 & 300 Series and PRC— See CLN6097A Battery listing.	NLN6267A w/NPN1007 Power Supply	Yes	Yes*	*Use NKN6111A Cable Kit.
		PT400 Series	NLN6408A w/NPN1006 Power Supply	Yes	*Yes	*Use NKN6095A Cable Kit. Rate Selector Switch Position Charge Current Pins 2-4 Pins 1-4 Trickle 13-18 ma. 9-12 ma. Normal 80-105 ma. 27-38 ma. High 245-265 ma. 100-130 ma.
NLN6488A	5	Tone Pageboy also Bellboy	NLN6394A	Yes	*Yes	Master *Battery Adapter NLN6395A 2-3 ma. Trickle 14 ma. Charge.
NLN6489A	5	Tone Pageboy also Bellboy	NLN6394A	Yes	*Yes	Axuiliary. Same specs & Adapter as above.
NLN6490A	23	Tone Pageboy also Bellboy	NLN6394A	No	Yes	14 ma./3 ma.
NLN6491A	23	Tone & Voice Pageboy	NLN6431A	No	Yes	14 ma./3 ma.
NLN6531A	1	P43 DDN Series	NLN6408A	Yes	No	Charge 150 ma. Trickle 10 ma.
NLN6684A	1	Slim Line HT 220's	NLN6682A	Yes	Yes	38 ma./3 ma.
NLN6685A	12	Slim Line HT 220's	NLN6682A	Yes	Yes	38 ma./3 ma.
NLN6691A	1	Slim Line HT 220's	NLN6682A	Yes	No	22 ma./4.1 ma.
NLN6756A		Omni-Housing HT 220's	NLN6761A	Yes	Yes	90 ma./3 ma.
NLN6804A	1	Omni-Housing HT 220's	NLN6761A	Yes	Yes	90 ma./3 ma.
NLN6806A	1	HT 100's	NLN6781A	Yes	Yes	7.5 ma./1 ma.
NLN6806B	1	H13FFN	NLN6781B	Yes	Yes	7.5 ma./1 ma.
NLN6807A	12	H13FFN	NLN6781A	Yes	Yes	9 ma./1 ma.
NLN6807B	12	H13FFN	NLN6781B	Yes	Yes	9 ma./1 ma.
NLN6892A	1	HT 220's Omni-Housing	NLN6761A	Yes	No	42 ma./4.4 ma. Vehicular Charger.
NLN6895A	1	H23, 4, 33, 4FFN Optional Rapid Charge	NLN6899A NLN6682A-6761A	Yes Yes	Yes Yes	Rapid Charger 250 ma./25 ma. 25 ma. Rate only!
NLN6896B	12	H23, 4, 33, 4FFN Optional Rapid Charge	NLN6899A	Yes	Yes	Rapid Charger 250/25 ma.
NLN6897A	1	H23, 4, 33, 4FFN Optional H.D.	NLN6900A	Yes	Yes	Rapid Charger H.D. 450/45 ma.
NLN6898B	12	H23, 4, 33, 4FFN Optional H.D. Rapid Charge	NLN6900A	Yes	Yes	Rapid Charger H.D. 450/45 ma.
NLN6967A	1	Page Boy II	NLN6965A	Yes	Yes	Vehicular Charger & Antenna Coupler.
NLN8004A	1	Handie Com.	NLN8096A	Yes	Yes	Rapid Charge.
NLN8005A	1	Handie Com.	NLN8002A	Yes	Yes	Standard Charge.
NLN8086A	4	Page Boy II	NLN6965A	Yes	Yes	115/230 volts.
NLN8087A	6	Page Boy II	NLN6965A	Yes	Yes	115/230 volts
NLN8205A	6	Handie Com.	NLN8002A	Yes	Yes	Standard Charge.
NLN8206A*	6	Handie Com.	NLN8096A	Yes	Yes	Rapid Charge *Requires NLN8207A Power Supply.
NLN8207A	—	Handie Com.	—	—	—	Power Supply for NLN8206A (will Power 2—Total of 12 Batteries)
NLN8238A	1	Page Boy II	NLN6965A	Yes	Yes	230 v. Motorola

*See Comments Column

Portable Charger Replacement Parts

Single Unit Chargers

	Sleeve & Contact									Base			Base Plate			Rubber Bumpers (Legs)			Fuses			Fuse Holder & Cover		Escutcheon		Toggle Switch	Bulbs Charge Normal	Heavy Duty					Trickle (Charge)	Lamp Sckt. Brk.	Jewel ENC	Jewel Clear
	1-80707A87	1-80775A20	1-80787A27	1-80790A78	1-80794A18	1-80792A89	1-80792A26	1-80707A89	1-80707A91	15-82224E01	15-82224E03	1-80707A88	64-82227E01	1-80793A02	27-82243B01	75-82249E01	75-84660H01	75-82246B01 (Pad)	65-480555	65-475395	65-474899	9-80283C02	9-865564	13-82260E01	13-84661H01	40-80248	65-82010C03 #756	65-82010C01 #1819	65-81016 #1829	NE51H 65-818438	65-84686H01 2 Reg.	65-868606 NE2H	65-818438	60-17135	60-82087A01	60-898914
NLN-6259A	X									X			X			X			X			X		X		X	X	X					X	X		X
NLN-6259B		X								X			X			X			X			X		X		X	X	X					X	X		X
NLN-6684A			X								X		X			X			X			X		X		X			X				X	X		X
NLN-6804A				X							X		X			X			X			X		X		X			X				X	X		X
NLN-6806A																						X		X		X				X			X	X		X
NLN-6806B					X						X		X			X			X			X		X		X				X			X	X		X
NLN-6895A						X					X			X			X			X		X			X						X					
NLN-6897A							X				X			X			X			X		X			X						X					
NLN-6102A								X				X			X			X			X		X									X			X	
NLN-6104A									X			X			X			X			X		X									X			X	

Multiple Unit Chargers

	Sleeve & Contact									Lamp Sckt. & Brk. Pilot		Unit (Charge)		Lamp Sckt. Unit		Lamp Brk. Unit	Bulbs Pilot		Trickle	Charge			Jewel & Lens					Switch Pilot	Unit	Fuses		Fuse Cover & Holder		Rubber Bumpers
	1-80787A27	1-80790A78	1-80794A18	1-80792A89	1-80792A96	1-80775A22	1-80708A34	1-80707A24	1-80787A27	60-17135	60-82096A01	60-17135	60-82087A01	9-84806H01	9-84747H01		65-818438	65-898920	65-818438	65-868606	65-82010C16	65-810161	60-898914	61-82361J01 Red	61-82361J02 Grn.	Clear use 60-82906A01	Red use 60-82087A01	40-482097	40-82048	65-804910	65-817955	9-82083C02	9-865564	
NLN-6685A	X									X				X		X	X		X			X	X					X	X	X		X		
NLN-6756A		X								X				X		X	X		X			X	X					X	X	X		X		
NLN-6807A			X							X		X					X		X			X	X					X	X	X		X		
NLN-6896B				X											X						X			X	X						X	X		
NLN-6898B					X										X						X			X	X						X	X		
NLN-6260B						X				X				X		X	X		X			X	X			X	X	X	X	X		X		X
NLN-6011A							X				X		X					X		X							X	X		X			X	
NLN-6060A							X				X		X							X						X	X							
NLN-6118A								X			X		X					X		X							X	X		X			X	
NLN-6119A								X					X							X							X							
NLN-6079A									X		X		X					X		X						X	X	X		X		X		X

Handie-Com Chargers

	Contact Pin	Contact Spring	Contact Washer	Sleeves & Contact		Housing			Escutcheon		Base Plate	Top Plate		Lamp Socket		Lamp		Lens				Fuse				Fuse Holder & Cover	Rubber Bumpers	Power Supply
	39-05605A01	41-82093A02	4-84734A01	1-80706C19	1-80706C54	15-82490J01	15-82490J02	15-82841J01	13-82493J03	13-82493J01	64-82491J01	64-82843J01	64-82843J02	9-82890J01	9-82488J01	65-810161	65-82110C03	61-82890J01 Red	61-82890J02 Grn.	61-82896J01 Red	61-82896J02 Grn.	65-13290	65-136778	65-475395	(Power Supply) 65-817955	9-82083C03	75-82554A04	NLN-8207A
Rapid Charge Single Unit NLN-8004A	X	X	X			X			X		X	X			X	X		X	X			X					X	
Standard Charge Single Unit NLN-8005A	X	X	X				X			X	X		X		X		X			X			X				X	
Standard Charge Multi-Unit NLN-8205A				X				X						X			X			X				X		X	X	
Rapid Charge Multi-Unit (Power Supply Reg.) NLN-8206A					X			X						X		X				X	X				X	X	X	X

Vehicular Chargers

	Sleeve & Contact				Slim Line Sleeve Insert	Escutcheon				Switches	Bulbs						Lamp Socket & Jewels			Fuses	Jewels		
	1-80740A19	1-80762A09	1-80792A82	1-80789A71	1-80789A70	13-82673G01	13-83048A01	13-83371D01	13-83434C01	40-482097	Pilot 65-861828	Charge 65-82671G01	Charge 65-82671G01	Pilot 65-868908	Charge 65-868908	Pilot 65-861828	Red 9-82684G01	Amber 9-82684G04	Blue 9-82684G03	60-304908	Red 61-83436B01	Blue 61-83436B03	Amber 61-83436B04
NLN-6270A						X				X	X	X					X	X		X	X		X
NLN-6354A	X						X			X	X		X				X	X		X	X		X
NLN-6418A		X						X		X		X		X			X	X		X	X		X
NLN-6531A									X	X		X			X	X		X					X
NLN-6691A			X		X		X			X					X	X	X		X	X	X	X	
NLN-6892A				X			X			X							X		X	X	X	X	

“H & P” SERIES

NLN-6029A

Housing & cover	1-863910
Base Riv	1-863909
Base Plate	15-834323
Switch, pilot	40-811826
Switch, unit	40-811826
Lamp socket & jewel	60-859510
Fuseholder & cover	9-865564
Fuse	65-475395

CRANE CONTROL

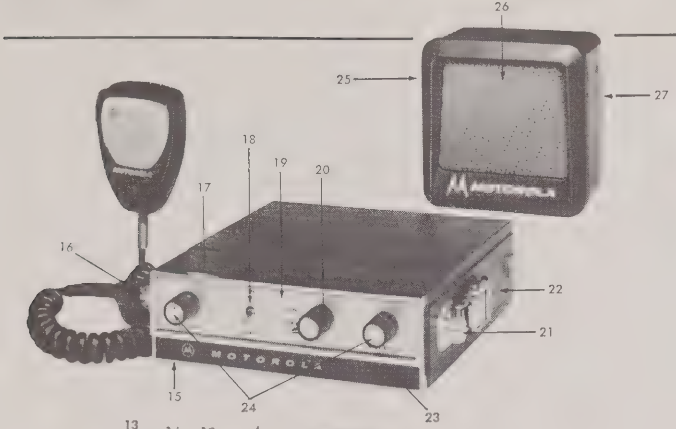
NLN-6480A

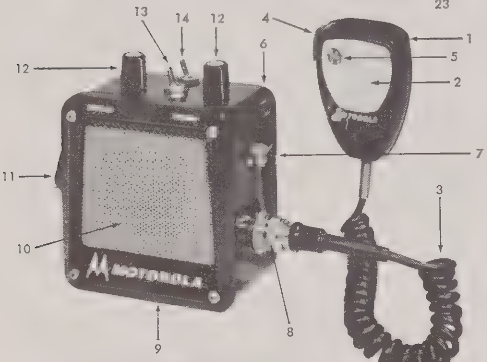
Base	
Chassis rivet	1-80762A67
Rubber bumper	37-87224
Escutcheon	33-83390D01
Switch, pilot	40-482097
Switch, unit	40-83568D01
Socket light & jewel	60-17135
Jewel	60-848914
Lamp	65-818438
Fuse cover & receptacle	9-865564
Fuse	65-475395

Miscellaneous Replacement Parts

MODEL	CHARGING BLOCK ASSEMBLY	CONTACTS SHORT	CONTACTS LONG	SPRINGS SHORT	SPRINGS LONG	WASHER SHORT
NLN6011A	1V80708A34	30A82092A01	39A82092A04	41A82093A01	41A82093A02	4A82094A01
NLN6060A	1V80708A34	39A82092A01	39A82092A04	41A82093A01	41A82093A02	4A82094A01
NLN6118A	1V80707A24	39A82092A01	39A82092A04	41A82093A01	41A82093A02	4A82094A01
NLN6104A	1V80707A91	39A82092A01	. . . .	41A82093A01	.	4A82094A01
NLN6121A	1V80707A89	39A82092A01	....	41A82093A01	....	4A82094A01
NLN6354A	1V80740A19	. . . . .	39A82092A04	. . . .	41A82093A02	4A82094A01

Solid State Dispatcher FM Radio Replacement Parts





MICROPHONES

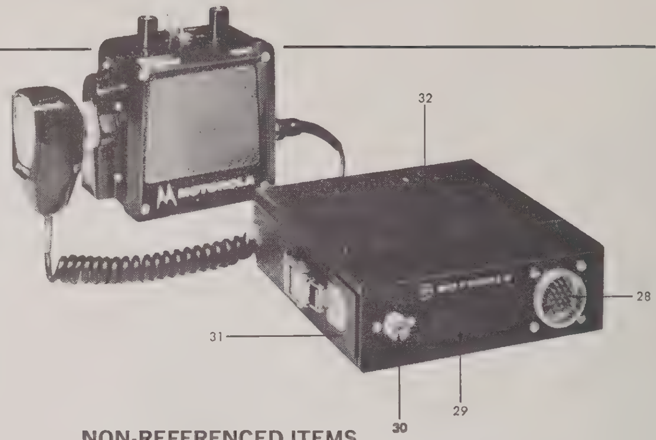
REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1V80720A95	Assem., Hsng., Riv. (Back) U/W NMN6006A
	1V80770A57	Assem., Hsng., Riv. (Back) U/W NMN6032A
	1C83188G01	Assem., Switch and Housing (Back) U/W NMN6034A
2	15D82701B03	Housing, Mic. (Front) U/W NMN6006A
	15D82701B08	Housing, Mic. (Front) U/W NMN6032A and NMN6034A
3	1V80721A30	Assem., Coiled Cord & Plug U/W NMN6006A
	1V80770A54	Assem., Coiled Cord & Plug U/W NMN6032A
	1V80770A61	Assem., Coiled Cord & Plug U/W NMN6034A
4	38A852699	Button, Microphone
	40C82263G01	Switch, Mic. (DPST)
	43B82706B01	Sleeve U/W Switch
5	13K864439	Emblem

NON-REFERENCED ITEMS

	59-83272G01	Cartridge, Mic. (Includes Pre-Amp). Replaces 59-82933C01
	42B82702B02	Retainer, Cartridge
	32A82703B01	Gasket, Mic.
	42A852710	Strap (Pltd)

CONTROL HEADS & CABLE

6	1V80770A09	Assem. Housing Riveted U/W NCN6076AE, 78AE
	1V80770A10	Assem. Housing Riveted U/W NCN6076AF, 78AF
	1V80770A11	Assem. Housing Riveted U/W NCN6076AH, 78AH
7	40-482097	Switch, Toggle (On-Off) SPST. Replaces 40-83477E03
8	1V80715A85	Assem. Mic. Conn. (Potted)
9	13B82414B02	Bezel, Speaker
10	13C83053G01	Grille, Speaker
11	1V80718A12	Assem. Cover & Mic. Mounting Riveted
12	36B82630H01	Knob, Control
	18D82515B43	Pot. 5K (Squelch)
	18D82515B44	Pot. 25K (Volume)
13	40-80246	Switch, Toggle (2 Freq.) DPDT. Replaces 40-83477E01
14	40-80248	Switch, Toggle (P.L. On-Off) SPDT. Replaces 40-83477E02



NON-REFERENCED ITEMS

REF. SYMBOL	PART NUMBER	DESCRIPTION
	1V80776A91	Assem. Control Cable U/W NCN6076AE, AF, AG, AH
	1V80776A92	Assem. Control Cable U/W NCN6078AE, AF, AG, AH
	50C850633	Speaker
	46A82930B01	Stud, Threaded
	32A82407B01	Gasket, Grille
	35A849461	Cloth, Grille
	64B82406B01	Plate, Gasket
	32B82408B01	Gasket, Speaker

CONTROL PANELS

15	64D83449E04	Panel, Front U/W NCN6075AE
	64D83449E01	Panel, Front U/W NCN6075AF, AG
16	1V80769A96	Assem. Mic. Connector
17	1V80769A80	Assem. Sleeve Riveted (Complete)
18	40-482097	Switch, Toggle (SPST). Replaces 40-83477E03
19	13C83450E01	Escutcheon, Front Pnl. 1 Freq. Std. Sql.
	13C83450E02	Escutcheon, Front Pnl. 2 Freq. Std. Sql.
	13C83450E03	Escutcheon, Front Pnl. 1 Freq. Private Line
20	36B82630H01	Knob, Control
	40C83475E02	Switch, Rotary (2 Pole 2 Pos.)
21	9C82817E01	Receptacle, Antenna
22	1V80770A45	Assem. Housing Riveted
23	1V80769A79	Assem. Lamp & Jewel (Red)
	32A83444E01	Gasket, Jewel
24	36B82629H02	Knob, Control
	18D82515B43	Pot. 5K (Squelch)
	18D82515B44	Pot. 25K (Volume)

SPEAKER

25	13D83530E01	Bezel
26	13C83053G01	Grille
27	15C82302H03	Housing

NON-REFERENCED ITEMS

	1V80774A45	Assem. Power Cable
	35A849461	Cloth, Grille
	64B82406B01	Plate, Gasket
	13C83053G01	Grille, Speaker
	32B82407B01	Gasket, Grille
	50C850633	Speaker (5")

TOP PANEL (REMOTE CONTROL MODEL)

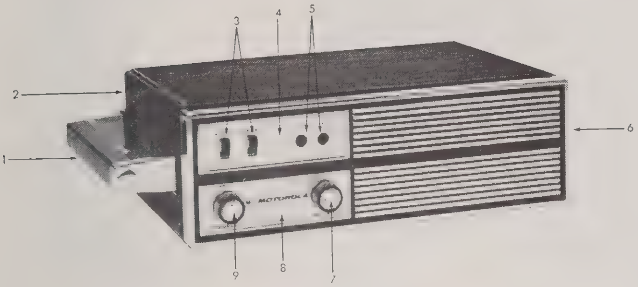
28	1V80769A15	Assem. Connector (Complete W/leads)
	28B83469E01	Connector Only (23 Pin)
29	64C83408E01	Panel
30	9K867432	Antenna Connector
31	1V80769A20	Assem. Sleeve Riveted
32	NHN6161A	Housing
	1V80770A45	Assem. Housing Riveted

NON-REFERENCED ITEM

	33B83476E01	Nameplate (Model)

Alert Monitor Receiver
Closed Circuit Television

TRANSISTORIZED ALERT MONITOR RECEIVER



Fire Fighter Only
LO1CND/LO3CND Series

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	55-82844J01	Handle only
	3-120900	Machine screw (6-32 x 5/16 phil bin)
2	15-84066H03	Housing only (red)
4	13-82584J02	Escutcheon (1 pilot light hole only)
	13-82584J03	Escutcheon (as shown)
6	64-83386E04	Front panel (red)
8	13-82584J01	Escutcheon

Alert Monitor Only
MO1CNB/MO3CNB/MO4CNB Series

1	1-80770A80	Handle assembly only
	55-83565E01	Handle
	38-82033B29	Plug button (handle)
	3-83174C01	Set screw
2	1-80770A79	Housing and handle assembly
	15-84066H01	Housing only
4	13-83561E02	Escutcheon (as shown)
	13-83561E03	Escutcheon (one pilot light hole only)
6	1-80774A76	Assem. Front panel w/speaker gasket and bottom escutcheon
	64-83386E01	Front panel
8	13-83560E01	Escutcheon

Parts Common to Both Receivers

3	40-83890A02	Switch, slide (DPDT) alert/mon
	40-83547E01	Switch, slide (SPST) reset
5	61-83603E01	Lens (blue)
	61-83604E01	Lens (red)
7	36-82628H09	Knob, volume
	18-83519E01	Pot. 25k w/switch (volume)
9	36-82628H08	Knob, squelch
	18-83518E01	Pot. 5k (squelch)

Non-Referenced Common Parts

KIT/PART NO.	DESCRIPTION
65-83573E01	Lamp, pilot
9-83567E02	Socket, pilot lamp
65-892098	Fuse (3/16 amp 125v slow blow)
65-804910	Fuse (1 amp 125v slow blow)
50-83566E01	Speaker
32-83563E01	Gasket (speaker)
30-83562E02	A.C. power cable
7-83580E01	Bracket, handle mounting
28-83511G01	Socket (back of housing)
9-82083C02	Fuse holder

Accessory Items for Both Receivers

KIT/PART NO.	DESCRIPTION
NKN-6123A	DC power plug (plugs into cigarette lighter)
NKN-6131A	Mobile antenna adapter (for use with mobile antenna)
NLN-6588A	Mobile mounting rack
NLN-1082A	Emergency power supply (nickel-cadmium battery, charger & switchover)
NAB-6191A	Wire antenna 30-42 MHz
NAB-6192A	Wire antenna 42-50 MHz
NAD-6200A	Whip antenna 150-174 MHz
NAD-6190A	Telescopic antenna 150.8-174 MHz (alert monitor only)
NAE-6105A	Whip antenna 406-470 MHz (alert monitor only)
TSN-6005A	Auxiliary speaker (less volume control)
TSN-6006A	Auxiliary speaker (with volume control)

CCTV Replacement Parts and Kits

KIT/PART NO.	DESCRIPTION	
SLN-6116B	Video Amplifier Kit	S1140A & B Cameras
SLN-6167B	Power & Deflection Kit	
SLN-6183A	Vidicon Kit (7735AM)	
24C82563F01	Focus Coil	
24C82562F01	Yoke	
SLN-6179A	Video Amplifier Kit	S1141A Cameras
SLN-6180A	Power & Deflection Kit	
SLN-6181A	Vidicon Kit	
24C82563F01	Focus Coil	
24C82562F01	Yoke	
SLN-6190A	Circuit Board Kit	S1142A Cameras
SLN-6191A	Vidicon Kit	
1V80798A86	Deflection Assembly	
SCN-6125A	19″ Monitor Control Panel Kit	S1219A 19″ Monitor
SLN-6148A	Video Amplifier And Deflection Kit	
SLN-6163A	Horizontal Output Kit	
1V80757A59	Yoke	
19EBP4	Picture Tube	
24D743765	Yoke	S1101C & 2C 14″ Monitor
14WP4	Picture Tube	
SLN-6157A	Video Amplifier Kit	S1120C Camera
SLN-6158A	Vertical Deflection Kit	
SLN-6159A	Horizontal Deflection Kit	
SLN-6156A	Camera Junction Unit	
SCN-6109A	Local Control Unit	
24D82291D01	Focus Coil	
24D82291D03	Yoke	
61P84307A37	Vicor High Temperature Replacement Glass for HT-10 Housing	

Coax and Control Cables

KIT/PART NO.	DESCRIPTION
SKN-6111A	RG59B/U Coax Cable
SKN-6112A	Double-Shielded Polyfoam Coax Cable
SKN-6113A	9-Conductor Control Cable
SKN-6114A	16-Conductor Control Cable
SKN-6115A	23-Conductor Control Cable
SDN-6118A	29-Conductor Control Cable

Coax Connectors

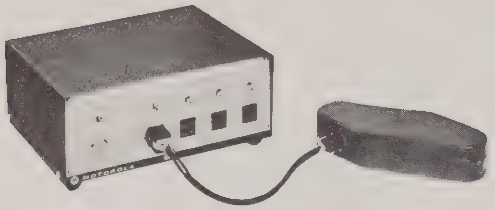
KIT/PART NO.	DESCRIPTION
SLN-6154A*	Male, UHF For RG59B/U Coax
SLN-6155A*	Male, UHF For Double-Shield Coax

*Kit includes two connectors

Replacement Motors and Brushes for Pan & Tilt Units

PART NO.	DESCRIPTION	U/O MODEL
59P866771	Motor (210-055-1)	VSP-020-40
59P83043H51	Motor (Pan) (210-055 1P)	VSP-020-42
59P83043H52	Motor (Tilt) (210-055 1T)	VSP-020-42
59P83043H53	Motor (Expl. Proof) (210-055-2)	VSP-020-41
39P83150D29	Brush Set	VSP-020-40
39P83150D30	Brush Set	VSP-020-42
51P83150D12	Brush Set	VSP-020-40
40P83043H54	Limiter Switch (180-402-1)	All Models
40P83043H55	Tilt Limit Switch (180-402-3)	All Models
40P83043H56	Dual Pan Limit Switch (180-402-4)	Indoor Models

Signaling Products/Kits and Accessories



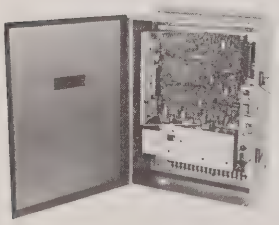
Battery Charger: The battery charger will charge up to four batteries or portables simultaneously. Charging current is regulated for maximum battery life. Operation is from 117 VAC 50-60 cps. Plug-in cables connect the charger to the portable or battery.

Batteries: Electrical power for the portable unit is provided by a self-contained, rechargeable, nickel-cadmium battery, which provides continuous eight hours operation and may be recharged either in or out of the portable unit. The rechargeable battery provides always-like-new performance without frequent purchases or inventory maintenance.

MODEL NO.	DESCRIPTION
NLN6480A	Battery Charger
NKN6111A	Battery Charger Cable Kit (For use with NLN6480A Battery Charger and Battery)
CLN6097A	Rechargeable Nicad Battery
CLN6095A	Transmitter Carrying Harness (Standard size)
CLN6096A	Transmitter Carrying Harness (Large size)

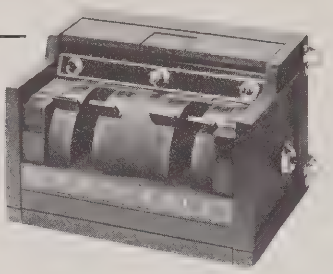
M70 PRC Spare Boards and Unique Components

MODEL NO.	DESCRIPTION
CLN-6235A	Driver board
CLN-6237A	Logic driver board
CLN-6239A	External ASO board
CPN-6006A	Power supply
48-82965F01	Thyristor (triac)
51-04488D06	Integrated circuit MC1569R
8-82987E09	Capacitor—Mylar (.047-10-400)
17-82305F05	Resistor, WW (12K-5-3)



Motorola Alarm Reporting Systems (Mars and AR81)

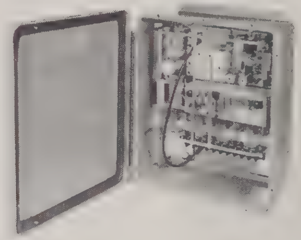
MODEL NO.	DESCRIPTION
CLN-6190A	Nicad Battery 1.2 ah
CLN-6191A	Switched Charger
CLN-6208A	Nicad Battery 4 ah
CLN-6213A	Float Charger
CLN-6195A	Switching Board
CLN-6197A	Tone Generator Kit
CPN-6007A	Charger
CLN-6254A	"AR 81" Alkaline Battery
TFD-6000A	Harmonic Filter
CLN-6186A	Encoder Board Kit
CLN-6187A	Expansion Board Kit
CKN-6025A	Cable Kit
CLN-1075A	"AR 81" Alkaline Battery Pack



Standard PRC Control Transmitter and Receiver Boards and Kits

MODEL NO.	DESCRIPTION
CLN1040A	Diode Matrix Kit (Consists of CLN6092A and CLN6136A)
CLN6215A	Low Multi-Frequency Oscillator Circuit Board
CLN6216A	High Multi-Frequency Oscillator Circuit Board
CLN6082B	Sequence Verifier Board
CLN6083B	Address Verifier Board
CLN6084B	Auxiliary Function
CLN6090B	Hi Tone Decoder
CLN6091B	Lo Tone Decoder
CLN6093A	Relay Driver Kit
CLN6094B	Function Motor Decoder
CLN6099B	Driver Limiter Kit
CLN6151B	Automatic Safety Over-ride
CLN6157A	Motor Switch Replacement Kit
CLN6158A	Magnet Switch Replacement Kit
CLN6160A	Scanner Board Kit
CLN6167A	Operator Release Kit
CLN6183A	Pull-On Push-Off Crane Switch Kit
CRC1000BB	72-76 MHz Receiver* (one freq.)
CRC1000BC	72-76 MHz Receiver (two freq.)
NLC6000A	Transmitter Crystal Kit (Specify Freq.)
NTC6010AA	Transmitter Circuit Board

*Requires TLN1081A Channel Element

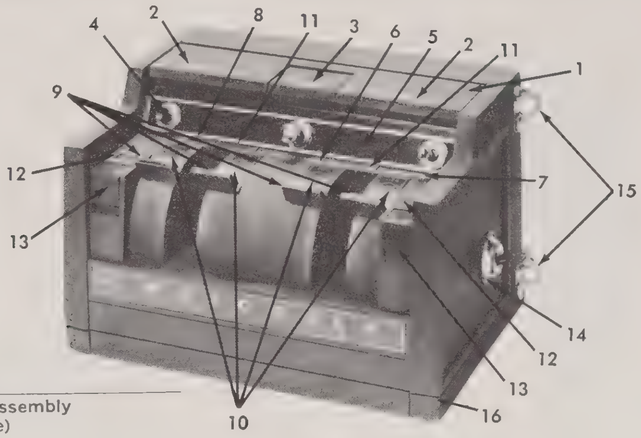


Control Products 504 Radio Switch

MODEL NO.	DESCRIPTION
CHN-6018A	Metal Housing Kit
CHN-6019A	Plastic Housing Kit
CLN-6225A	Decoder Chassis
CLN-6218A	Encoder Board
CAD-6000A	High Band Ext. Antenna
CLN-6227A	Pole Mount Kit
CLN-6221A	Time-out Timer Module
CPN-6005A	Emergency Power Supply
CLN-6220A	Decoder & Interface Board
CRD-1004AA	Rcvr. Brd. 150 MHz
CRD-1004AB	Rcvd. Brd. 162 MHz
CRB-1001A	Lo-Band Rec. Brd. (less crystals)
CRC-6000A	Mid-Band Rec. Brd. (less crystals)
CAB-6000A	Low Band Antenna
CKN-6025A	Internal Cable Kit
1-80798A51	Address Switch Deck Assem.
1-80798A53	Function Switch Deck Assem.
1-80798A48	Board & Components Assem.
1-80798A55	Plate Bottom Assem.
80-82623F01	Momentary Relay
80-82624F01	Magnetic Latch Relay

NOTE: Crystals and Channel Elements To Be Ordered From Crystal Services.

PRC Transmitter and Traffic Control Intersection



CONTROL TRANSMITTER REPLACEMENT PARTS

REF. SYMBOL	PART NUMBER	DESCRIPTION
1	1V80751A70	Push to Operate Bar Assembly
2	54B83612B01	Label (Push to Operate)
3	54B83595B01	Label (Alarm)
	54B83595B02	Label (Alarm/Reset)
	54B83595B03	Label (Reset)
4	38B83560B01	Push Button (For 40C83559B01)

NOTE: For Escutcheons listed below "H" indicates a Hole. "O" is a blank. Holes indicated have the key for the switch on the left side, looking at the escutcheon with the tab in the up position.

REF. SYMBOL	PART NUMBER	DESCRIPTION
5	13C83631B01	Switch Escutcheon (NO Holes)
	13C83631B02	Switch Escutcheon (H-O-O-O-O)
	13C83631B03	Switch Escutcheon (O-O-H-O-O)
	13C83631B04	Switch Escutcheon (O-H-O-H-O)
	13C83631B05	Switch Escutcheon (O-O-O-O-H)
	13C83631B06	Switch Escutcheon (H-O-H-O-O)
	13C83631B07	Switch Escutcheon (H-H-O-H-O)
	13C83631B08	Switch Escutcheon (O-O-H-O-H)
	13C83631B09	Switch Escutcheon (O-H-O-H-H)
	13C83631B10	Switch Escutcheon (H-O-H-O-H)
	13C83631B11	Switch Escutcheon (H-H-O-H-H)
	13C83631B12	Switch Escutcheon (H-O-O-O-H)
	13C83631B13	Switch Escutcheon (H-H-H-O-H)
	13C83631B14	Switch Escutcheon (H-H-H-O-O)
	13C83631B15	Switch Escutcheon (O-H-H-O-H)
	13C83631B16	Switch Escutcheon (O-H-H-H-O)
	13C83631B17	Switch Escutcheon (H-H-H-H-H)
6	54B83568B01	Label (On-Crane-Off)
7	54B83568B02	Label (On-Lights-Off)
8	54B83568B03	Label (Brake)
	54B83568B04	Label (Operator Rel)
	54B83568B05	Label (On-Hold-Off)
	54B83568B06	Label (Main-Trolley-Aux)
	54B83568B07	Label (Blank)
	54B83568B08	Label (Crane Select)
	54B83568B09	Label (Pull On-Push Off)
9	36C83601B09	Switch Lever (Aux Hoist)
	36C83601B10	Switch Lever (Trolley)
	36C83601B11	Switch Lever (Hoist)
	36C83601B12	Switch Lever (Bridge)

REF. SYMBOL	PART NUMBER	DESCRIPTION
10	54B83565B01	Label (Down-Up)
	54B83565B03	Label (North-South)
	54B83565B05	Label (South-North)
	54B83565B06	Label (West-East)
	54B83565B07	Label (Blank)
11	54B83566B03	Label (Blank)
	54B83566B01	Label (Hook LT)
	54B83566B02	Label (Hook RT)
12	54B83567B01	Label (Mag)
	54B83567B02	Label (Mag Off)
	54B83567B03	Label (Grip)
	54B83567B04	Label (Grip Off)
	54B83567B05	Label (Blank)
13	38C83247C01	Button (For Mag and Mag off)
14	40B82220H01	Switch Lock (2 Keys Included)
	55A82000H01	Key #H2141
15	7A83585B01	Ring Bracket (4 Regd.)
16	1-84308A13	Housing & Insulator

NON-REFERENCED ITEMS

PART NUMBER	DESCRIPTION
36B83813D01	Knob (No. 1, 2 & 3)
36B83813D03	Knob (No. 1 & 2)
3A83641C01	Set Screws (For Above Knobs)
1V80752A36	Battery Shield Assembly
32B83607B01	Rear Cover Gasket
32A83591B01	Switch Gear (For 40C83782C01 Switches)
15C83589B01	Back Cover (Less Hardware shown below)
38B82264E01	Button
4C82418B01	Washer
55B83055C01	Latch
3S1921	Screws (2 Used)
4C8406	Washer (2 Used)
15C83590B01	Bottom Cover

TRAFFIC CONTROL INTERSECTION EQUIPMENT

MODEL NO.	DESCRIPTION
SLN6000B	Function Relay
SFN6001A to SFN6019A	Sync Tone Filter, (See Sync Tone Frequency Table for selection
P-7810	"VIBRASPONDER" Unit
TLN6571A	Dummy Vibrasponder Kit

ANTENNAS AND ACCESSORIES

MODEL NO.	DESCRIPTION
TAF6000A	960 MHz, Directional Antenna (10 db gain), mounting hardware not supplied
CLN6045A	Transmission Line Connector Kit, for use with RG-9/ cable—includes two UG-21B/U connectors (type N)
CLN6049A	Transmission Line Connector Kit, same as CLN6045A, but for use with ¼ inch Foam Heliax cable
TLN6159A	Transmission Line Connector Kit, for use with RG-9/U cable—includes two UG-27A/U (type N) and two UG-21B/U (type N) connectors, used with TAF 6000A
CLN6068A	Transmission Line Connector Kit, same as TLN6159A, but for use with ¼ inch Foam Heliax cable
TK458	Wraplock Kit, 50 feet stainless steel wraplock
PK-609	RG/9U Transmission Line (supplied in bulk, 50 foot rolls only)
CDN6000A	Transmission Line Kit, ¼ inch Foam Heliax (supplied in bulk), installation tool for connector kits (CLN6049A or CLN6068A) provided with each order. Specify total length of cable in feet

SYNC TONE FREQUENCY TABLE

SYNC TONE FILTER KIT	FREQ. Hz	SYNC TONE FILTER KIT	FREQ. Hz
SFN6001A	1550	SFN6011A	2550
SFN6002A	1650	SFN6012A	2650
SFN6003A	1750	SFN6013A	2750
SFN6004A	1850	SFN6014A	2850
SFN6005A	1950	SFN6015	2950
SFN6006A	2050	SFN6016A	3050
SFN6007A	2150	SFN6017A	3150
SFN6008A	2250	SFN6018A	3250
SFN6009A	2350	SFN6019A	1350
SFN6010A	2450		

S1006B and S1007B SPARE PART

MODEL NO.	DESCRIPTION
SLN6020A	Sync Tone Jumper

SRF1000B SPARE PARTS

MODEL NO.	DESCRIPTION
SLN6034A	455 KHz I. F. Board
SLN6035A	27.60 MHz Oscillator Board, less crystal
SLN6036A	12.455 MHz Oscillator Board, less crystal
SLN6037A	12 MHz I. F. Board
SLN6011A	960 to 150 MHz Converter
SFN6000A	Filter-Permakay
LMM-37B	Crystal R. F.
LMM-B	27.60 MHz Crystal

NOTE: Crystals and Channel Elements To Be Ordered From Crystal Services.

Microphone Parts

*MOBILE (OLD DIE-CAST) MICROPHONE PARTS**

MISCELLANEOUS REPLACEMENT PARTS

40K 51045—Replacement Switch for TU341, TU342, TU343, P255 series, 50D 844798 and 50B 890923 microphones

38K 848315—Switch Button (push to talk) for all models

3A 16380—Hang Up Button (fits into back cover) for hanging microphone to support plate. For all models except TU342, TU352 and P255C

1-16241—Microphone Mounting Kit for hanging microphone. Includes one 64A 85596 support plate and two 3S 8101 mounting screws. For all models except TU342, TU352 and P255C

42B 893647—Strain-relief clamp and "S" hook for securing mike cable into control head

41K 838823—Plug End Spring for TU341, TU351, TU354 and P255A only

41A 852707—Microphone End Relief Springs for all models

35K 844077—Grille Cloth for all models

3S 1529—Cover Mounting Screw for all models

MICROPHONE CONNECTORS

28A 16370—Cable Connector, 4 prong

9B 16345—Chassis Receptacle, 4 contacts less locknut 2-81180 and washer 4-7699

28A 881072—Cable Connector, 6 prong

9A 881071—Chassis Receptacle, 6 contacts

9A 831337—Cable Receptacle, 4 contacts

9A 800636—Cable Receptacle, 6 contacts

3K 866936—Plug "Insert" Screws

42P 83150D84—Plug, Cable Clamp

COILED CORDS

30B 84269—Standard Coiled Cord, 11" retracted, with trimmed and tinned leads. For TU341, TU351 and P255A microphones

1V 80706A67—Standard Coiled Cord, 11" retracted. Includes 4 pin male microphone connector. For TU341, TU351 and P255A microphones

30K 475846—Standard Coiled Cord, 7" retracted, with trimmed and tinned leads. For TU342, TU352 and P255C microphones.

30B 891505—Tinsel Coiled Cord, 11" retracted, terminated in 4 spade lugs for 50D 844798, 50D 845121 and 50B 890923 microphones

30K 848347—Tinsel Coiled Cord, 11" retracted, terminated in 5 spade lugs for 50D 845122 dynamic speaker—microphone

30B 822726—Tinsel Coiled Cord, 13" retracted. Includes 4 pin male microphone connector For TU343, TU353 and P255E microphones

30-852740 — Replaces 30-848348 — Tinsel Coiled Cord, 12" retracted. Includes 4 pin male microphone connector. For TU354 dynamic speaker—microphone.

CARTRIDGES, RINGS, PRE-AMP

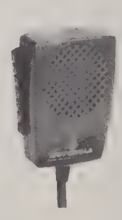
50K 810470—Carbon Replacement Cartridge for TU341, TU342, TU343, P255A, P255E, 50D 844798 and 50B 890823 mcirophones

50K 845123—Dynamic Replacement Cartridge for TU351, TU352, TU353, TU354, 50D 845121 and 50D 845122 dynamic microphones

42K 838820—Rubber Cartridge Mounting Ring for TU341, TU343, 50D 844798 and 50B 890923 microphone

42K 844075—Clamping Ring for 50K 810470 cartridge

1V 848112—Pre-Amp Assem. for TU351 series



CERAMIC MIC REPLACEMENT PARTS

For Original MOCOM • 10 Microphone

59P 83042H75—Mike Cartridge

1P 83042H76—Back Cover Assembly (includes stud)

15P 83042H77—Front Cover

38P 83042H79—Push Button

40-83042H80—Slide Switch (with Sponge Pad)

1P 83042H84—Coiled Cord and Strain Relief

***NOTE:** Replacement front covers and back housings are no longer available for old die-cast series microphones. It is recommended that a new microphone be ordered for badly damaged units.

MOBILE TRANSISTORIZED MICROPHONE PARTS

COILED CORDS

30B852740—Cord, Coiled copper wire 12″ retracted. Use on TU-351A

30K852742—Cord, Coiled (tinsel) 12″ retracted. Used on TU-353A and 1V852400

1V80706A67—Coil Cord & Plug 12″ retracted. Includes 4 pin male microphone connector. Used on TU-351A, TM6011A & TMN 6020A

30B82565B06—Cord, Coiled tinsel wire 8″ retracted. Used on TU-352A

1V80707A86—Coil Cord & Plug 8″ tinsel, retracted. Includes 4 pin male microphone connector with weatherproof connector cover. Used on TU-352A, NMN6003A

1V80707A58—Coil cord w/plug includes 4 pin plug & strain relief spring. For models TMN6013A & 6022A Plastic Microphones, and TMN6000A & TU353A (Tinsel Cord)

1V80724A28—As above, but includes Push to Talk Switch in one weather proof assembly for TMN6018A & TMN6023A weather proof plastic case microphones

1V854006—Cord, Coiled w/solderless spade lugs. Used on 1V852400

1-84135C01—Replaces 1-80709B94—Coil cord and plug 12″ retracted. Includes 5 pin-female "Micor" connector.

ELECTRICAL COMPONENTS

59C852603—Cartridge. (For Metal Case Microphones)

59-83272G01—Replaces 59-82933C01—Cartridge, with built in amplifier for all plastic case microphones

40C82202B01—Switch (DPST) Used on TU-351A only

40C82263G02—Switch (DPST) used on plastic case microphone

40B852734—Switch (SPST) Used on TU-352A, TU-353A and 1V852400, 1V80707A64, TMN6011A

1V861317—Pre-Amp. Assembly

28B16370—4 pin male plug

48-83750G05—Replaces 48-124317—Transistor (MN60)

14A861196—Transistor Insulator

MECHANICAL COMPONENTS

13B852703—Mic. Grill

35A852701—Grille Cloth

38A852699—Pushbutton, Standard

38-84559B01—Pushbutton, "Micor"

32B852702—Rubber Gasket (Metal Microphones)

32A82703B01—Rubber Gasket (Plastic Microphones)

42A82702B02—Cartridge Retainer (Plastic Microphones)

41A852707—Spring (Strain Relief)

42A852710—Clamp, Cable

42A852705—Strap

14A857137—Insulator (Between Clamp & Mic. Cart.)

14A857138—Insulator (Printed Circuit Assem.)

4K852762—Washer, Insulator spacer

13A852709—Emblem, Gold

13-83174B01—Emblem, Silver

13-84599B01—Emblem, Blue "Micor"

3S124693—Screw (6-32x¼ Phl. Rnd. Stl. Cad.)

3S127481—Mch. Scr. (6-32x⅞ Phl. Rnd. Pol. Nk.)

3S127924—Lockscrew (6-32x5/16 Phl. Rnd. Stl. Cad.)

4S400386—Lockwasher (#6)

MICROPHONE HOUSING PARTS

Motrac and Motran

15-82701B01—Front cover with grille, driftwood, plastic

1-80720A94—Back cover with grille, blue-grey, plastic

MOCOM • 10 and Industrial Dispatcher

15-82701B08—Front cover with grille, stellar blue, plastic

1-80712B63—Back cover with grille, stellar blue, plastic

"T" Power and Tube Type Mobiles

15-82701B05—Front cover with grille, light grey, plastic

1-80725A49—Back cover with grille, dark grey, plastic

15-852566—Front cover with grille, light grey, metal

1-854005—Back cover with grille, dark grey, metal

1-864588—Back cover with grille, blue grey, metal

Motorcycle and Industrial Dispatcher

15-82701B03—Front cover with grille, black, plastic

1-80720A95—Back cover, black, plastic

"Micor" Models

15-82701B12—Front cover with grille, shadow pearl, plastic

1-80709B93—Back cover, shadow pearl, plastic

PDK-13 TINSEL CORD REPAIR KIT

Kit includes Crimp Sleeves, Spade Lugs, Neoprene Sleeves. Enough material for repairing 5 tinsel cords.

MOBILE MICROPHONE REPAIR KIT

P-255—TU-341—TU-351—TU-352—TU-353

SAVE 10% — A handy assortment of mechanical components for replacement in the mobile microphones listed above is now available in a clear, see-through, self-sealing plastic bag. This assortment includes such items as insulators, clamps, screws, springs, washers, grille cloths, etc. Up to 5 microphones can be repaired from this assortment.

Order **PDK-592** microphone repair kit

TRANSISTORIZED MOBILE MICROPHONE REPAIR KIT

TU-351A—TU-352A—TU-353A—1V852400

SAVE 10%—An assortment of mechanical components for replacement in the transistorized microphone as listed is now available in a clear, see-through, self sealing plastic bag. This assortment includes such items as insulators, clamps, screws, washer, grille cloths, etc. Up to 5 microphones can be repaired from this assortment.

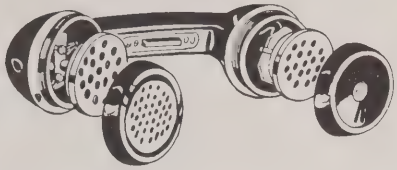
PDK-591 Transistorized microphone repair kit

Microphone Mounting Kit

1-16241—Microphone Mounting Kit for hanging microphone. Includes one 64A 85596 support plate and two 3S 8101 mounting screws. For all models except TU342, TU352 and P255C

Microphone Parts

HANDSET REPLACEMENT PARTS



Receiver Caps

PART NO.	MODEL
15K 840998	Western Electric and Roanwell Handsets
15K 850855	Stromberg-Carlson Handsets

Transmitter Caps

PART NO.	MODEL
15K 840999	Western Electric and Roanwell Handsets
15K 850856	Stromberg-Carlson Handsets

Receiver Cartridges

PART NO.	HANDSET TYPE
59K 51050	Western Electric and Roanwell Handsets
59K 850852	Stromberg-Carlson Handsets

Transmitter Cartridges

PART NO.	HANDSET TYPE
59K 51049	Western Electric and Roanwell Handsets
59K 850965	Stromberg-Carlson (TU-460) Desk Sets
PK-511	Replaces 59-850853 Stromberg-Carlson (NU-129)Handsets

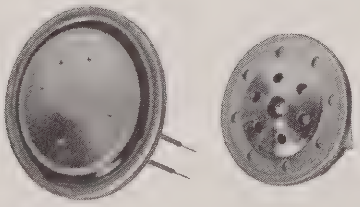
Push to Talk Switches

PART NO.	HANDSET TYPE
40K 834349	Roanwell (59-834032-804932)
40K 850860	Stromberg-Carlson (50-850961-847025)

Contacts, Mtg. Screws

PART NO.	DESCRIPTION AND TYPE	
3K 850859	(Screw-Contact Mtg.)	Stromberg-Carlson
3K 866829	(Screw-Switch Mtg.)	Stromberg-Carlson
3K 866830	(Switch to Mtg. Plate Screw)	Stromberg-Carlson

BASE STATION CARTRIDGES

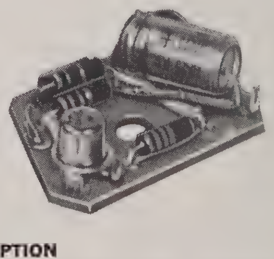


PART NUMBER	DESCRIPTION
59C 852603	For all TU 532, TU 533, TU 535, TU 536 series and TMN 6007A and TMN 6008A microphones
59K 810174	For P7245 series microphone
59K 851807	For TU 436 microphone
59-83272G01	Replaces 59-82933C01 Cartridge & pre-amp for TMN 6009 and 6010B desk set and TMN-6013A, 6049A, 6054A, 6055A, 6056A, microphones

HANDSET COIL CORD AND PLUG ASSEMBLIES

DESCRIPTION	USED ON	PART NO.
4 Cond. with 4 Prong Plug	P278 D&L NU129 NMN6007A NMN6017A	1V848171
	P278C & F	1V84354
4 Cond. With Solder Lugs	TMN6021A	1V80724A27
5 Cond. With 4 Prong Plug	TMN6006A TMN6015A	1V80704A50
	TMN6006B TMN6015B	1V80723A02
5 Cond. With Spade Lugs	1V852500 TU473 TU560	1V854066
	TMN6005A TMN6009A TMN6010A TMN6012A	1V80704A49
	TMN6005B TMN6009B TMN6010B TMN6012B TMN6039A TMN6040A	1V80723A01
	TMN6038A	30B82565B23
5 Cond. With 6 Prong Plug	TU477	1V854065
5 Cond. with 5 Prong Molded Connector (Micor)	TMN-6057A	1-84519C01

BASE STATION PRE-AMPLIFIERS



PART NUMBER	DESCRIPTION
1V 861317	Pre-Amp for TU 535 and TU 536 series microphone
1V 80705A81	Pre-Amp for TMN 6007A and TMN 6008A microphones
1V 848112	Pre-Amp for TU 436 microphone

For Additional Handset Parts See Index.

PORTABLE MICROPHONE REPLACEMENT PARTS

MODEL	CARTRIDGE	SWITCH	PUSH BUTTON	FRONT COVER	REAR COVER	CORD ONLY	CORD & PLUG ASSEMBLY	STRAIN RELIEF	MIKE PLUG
NU130*	59K865086	40K865087	38K865089	15A82041C01	15A82041C02	—	30D82565B17	41K865088	#
NU130‡	59K865086	40K837081	38K837079	15A82041C01	PK-70	—	30D82565B17	41K865088	#
NMN-6006A	59-83272G01	**40-82263G01	38-852699	15-82701B03	1-80720A95	—	30-82565B08	41-852707	#
NMN6008A	59K865086	40P82663G01	38P82663G02	15A82041C01	15A82041C02		30D82565B17	41K865088	#
NMN-6015A	59-83272G01	**40-82263G01	38-852699	15-82701B01	1-80720A94	—	30-82565B08	41-852707	#
NMN6018A	59C82857E01	**40C82863E01	38B82833E01	15C82828E01	15C82827E01		30D82565B17	37K480513	28A16370
NMN6019A	59C82960G01	**40C82863E01	38B82833E01	15C82828E01	1V80734A23	30D82565B21	1V80734A20	37B82324G01	9B82146D01♦
NMN-6019B	59-82960G01	**40-82863E01	38-82833E01	15-82828E01	1-80734A23	30-82565B21	1-80757A96	37-868208	9-82146D01♦♦
NMN-6020A	59-82960G01	**40-82863E01	38-82833E01	15-82828E01	1-80734A23	30-82285H01	1-80735A81	37-82324G01	9-82146D01♦
NMN-6020B	59-82960G01	**40-82863E01	38-82833E01	15-82828E01	1-80734A23	30-83980B01	1-80755A90	37-868208	9-82146D01♦♦
NMN-6021A	50-82660D01	**40-82863E01	38-82829H01	15-82822H01	1-80738A31	30-82565B22	1-80738A32	37-82324G01	1-80738A33♦
NMN6021B	50D82660D01	**40C82863E01	38B82829H01	15C82822H01	1V80738A31	30-84306H02	I-80780A93	37A868208	—
NMN-6022A	50-82660D01	**40-82863E01	38-82829H01	15-82822H01	1-80738A31	30-82285H01	1-80738A34	37-82324G01	1-80738A33♦
NMN6022B	50D82660D01	**40C82863E01	38B82829H01	15C82822H01	1V80738A31	30B83980B01	1V80778A98	37A868208	—
NMN-6023A	59-82960G01	**40-82863E01	38-82829H01	15-82822H01	1-80748A50	30-82565B21	1-80738A36	37-82329G01	1-80738A33♦
NMN6023B	59C82960G01	**40C82863E01	38B82833E01	15C82828E01	1V80748A50	30B82565B21	1V80779A13	37A868208	—
NMN-6024A	59-82960G01	**40-82863E01	38-82829H01	15-82822H01	1-80748A50	30-82285H01	1-80738A37	37-82324G01	1-80738A33♦
NMN6024B	59C82960G01	**40C82863E01	38B82833E01	15C82828E01	1V80748A50	30B83980B01	1V80779A14	37A868208	—
NMN-6025A	59-82960G01	**40-82863E01	38-82829H01	15-82822H01	1-80748A50	30-82285H01	1-80738A94	37-82324G01	1-80738A33♦
NMN-6025B	59-82960G01	**40-82863E01	38-82829H01	15-82822H01	1-80748A50	30-83980B01	1-80757A99	37-868208	1-80755A89♦♦
NMN-6027A	59-83361B01	**40-82863E01	38-82833E01	15-82828E01	1-80750A12	30-82285H01	1-80738A37	37-82324G01	1-80738A33♦
NMN6027B	59C83361B01	**40C82863E01	38B82833E01	15C82828E01	1V80750A12	30B83980B01	1V80779A14	37A868208	—
NMN-6028A	59-83361B01	**40-82863E01	38-82833E01	15-82828E01	1-80750A12	30-82565B21	1-80738A36	37-82324G01	1-80738A33♦
NMN6028B	59C83361B01	**40C82863E01	38B82833E01	15C82828E01	1V80750A12	30B82565B21	1V80779A13	37A868208	—
NMN-6030A	50-83466D01	—	—	15-83465D01	•1-80771A56	30-83980B02	1-80762A61	37-868208	1-80793A16♦♦
NMN-6031A	59-82933C01	**40-82263G01	38-852699	15-82701B03	1-80720A95	30-82565B30	1-80770A54	41-852707	#
NMN-6032A	59-82933C01	40-82263G01	38-852699	15-82701B08	1-80770A57	30-82565B30	1-80793A32	41-852707	—
NMN-6033A	59-82933C01	40-82263G01	38-852699	15-82701B03	1-80770A60	30-82565B30	1-80770A61	41-852707	—
NMN-6034A	59-82933C01	**40-82863E01	38-852699	15-82701B08	1-80786A44	30-82565B30	1-80770A61	41-852707	—
NMN-6036A	50-83466B01	**40-82263G01	38-83467D01	15-83465D01	1-80771A56	30-84306H01	1-80770A61	37-868208	1-80793A16♦♦
NMN-6039A	50-83466D01	**40-82863E01	38-83388G01	15-83380G01	1-80779A95	30-83980B02	1-80776A44	41-83463H01	9-82679H01
NMN-6040A	50-82162D01	40-82863E01	—	15-83380G01	1-80780A94	30-84306H02	1-80793A24	—	9-82679H01
NMN-6041A	50-83466D02	40-82159D01	—	15-84418H01	1-80793A49	30-84048H02	1-80793A48	42-84409H01	9-84039H01
NMN-6041B	50-82157J01	40-82159D01	—	15-82155J01	1-80703C71	30-84048H01	1-80702C18	42-84409H01	9-83039H01
NMN-6042A	50-83466D02	40-82159D01	—	15-84418H01	1-80793A51	30-84123H01	1-80793A50	42-84409H01	9-84039H01
NMN-6042B	50-82157J01	40-82159D01	—	15-84417H01	1-80793A51	30-84123H01	1-80793A50	42-84409H01	9-84039H01
NMN-6046A	—	—	38-83388G02	—	1-80789A82	—	—	—	—
NMN-6048A	50-83466D02	40-82159D01	—	15-84418H01	1-80793A53	30-84048H02	1-80793A52	37-84320H01	9-84039H01
NMN-6048B	50-82157J01	**40-82159D01	—	15-82155J01	•1-80703C73	30-84048H02	1-80791A26	37-84320H01	1-80793A52♦
NMN-6049A	50-82157J01	40-82159D01	—	15-84418H01	1-80793A53	30-84123H03	1-80792A09	41-84037H03	9-84039H01
NMN-6049B	50-82157J01	**40-82159D01	38-84414H01	15-82155J01	1-80790A12	30-84123H03	1-80792A09	37-82900J01	1-80793A54♦
NMN-6055A	59-82960G02	**40-82159D01	38-82833E02	15-82827E06	1-80704C58	—	1-80704C57	41-82620J01	1-82574J02♦
NMN-6055B	59-82960G02	**40-82159D01	38-82833E02	15-82827E06	1-80704C58	—	1-80704C57	41-82620J01	1-82574J02♦
NMN-6059A	50-82157J01	**40-82159D01	38-84414H02	15-82155J02	1-80706C24	—	1-82574J01	37-84320H01	—
NMN-6060A	50-82162D01	—	—	15-82565J02	1-05950A69	30-84648J02	1-05950A68	—	—
NMN-6061A	50-82162D01	**40-82090H01	38-82288G02	15-82565J02	1-05951A12	30-859004	1-05951A13	41-82547J01	9-84039H01♦
NMN-6062A	59-83272G01	**40-82263G02	38-84559B02	15-82701B08	1-80708C61	30-854038	1-80706C99	41-852707	28-84865A01

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*Supplier Turner ‡Supplier Shure **Back-up spring required, 41 B82856E01
♦Shell 15-82683H01 & Clamp 42-82682H01 for 9-82146D01 plug #Molded plug part of coil cord
♦♦Shell 15-83261C01 & Clamp 42-83262C01 •Push button included in back cover

Desk Set and Hang-Up-Box Parts
"Power-Voice" Megaphone Parts

DESK SET AND HANG-UP-BOX REPLACEMENT PARTS

DESCRIPTION	PART NUMBER
Handset with coil cord	
for models TMN 6009A & 6010A	1V 80723A03
for models TMN 6009B & 6010B	1V 80723A03
for models TMN 6038A	1V 80750A73
for models TMN 6040A	1V 80723A03
Handset only less transmitter cartridge for all models	50K 852602
Cartridge, microphone for TMN 6009A & 6010A	59C 82340A01
Cartridge, microphone for TMN 6009B, 6010B, 6038A & 6040A	59C 82933C01
Cartridge, receiver for all models	59K 850852
Switch, handset	40K 850860
Speakers	
for models TMN 6009A & B	50C 852738
for models TMN 6010A & B	50C 852738

Note: for additional handset parts see index.

MISCELLANEOUS PARTS

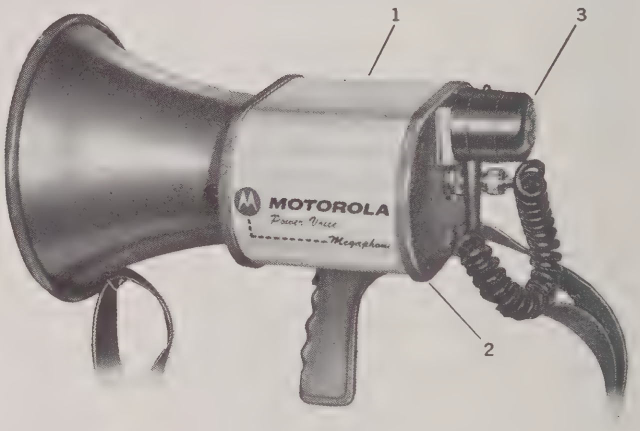
Speaker screen (desk set models)	35A 830164
Knob (All Vol. and Sq. for desk set models)	36A 82944A01
Knob (Control for hang up box)	36A 855070
Bulb, neon NE2H	65K 868606
Line cord and plug, 6 ft. (with fuses)	1V 80742A38
Fuse ⅛ amp 250V 3AG AGC	65K 474899
Plug, line (fused type)	28B 855978
Potentiometer, 500 ohm for hang up box	18C 801878

"POWER VOICE" MEGAPHONE REPLACEMENT PARTS

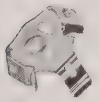
	PART NO.	DESCRIPTION
(1)	15B 852459	HOUSING
(2)	1V 852487	COVER, rear, riveted complete w/battery contacts
(3)	50C 851924	MICROPHONE w/coil cord

NON-REFERENCED PARTS

50D 858825	DRIVER unit
50A 82500D03	Mike Cartridge (for new type Turner Mikes)
36K 844351	KNOB, control
1V 852483	BOARD & CONTACTS (front) for batteries
1V 861672	BOARD & CONTACTS (rear) for batteries. Part of item 2 above
1V 852484	ASSEMBLY, battery separator w/spade bolts



MICROPHONE AND HANDSET HOLDERS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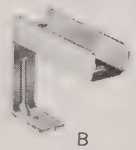
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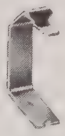
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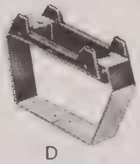
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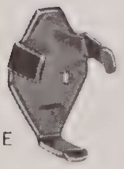
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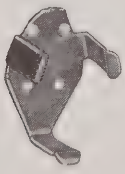
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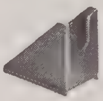
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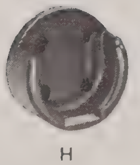
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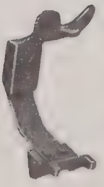

I

J-1

J

For "Handie-Talkie" Radio Units

PART NUMBER	USAGE
42K847537 (Fig. A)	"P" and "H" Series "Handie-Talkie" Units
1V848554 (Fig. B)	"H" Series "Handie-Talkie" Units
7B847008 (Fig. C)	"H" Series "Handie-Talkie" Units
1V881253 (Fig. D)	"Handie-Talkie" Units (Old)
42C82811E01	Mike holder for DDC series (not shown)

For Motorcycle Units

PART NUMBER	USAGE
51A483158 (Fig. E)	Solocycle 2-Wheel
7B845029 (Fig. F)	Transistorized Motorcycle "Dispatcher" Radio

For Mobile and Base Station Units

PART NUMBER	USAGE
7B801131 (Fig. G)	A.C. Utility
59B 80216 (Fig. H)	General
1V 858465 Fig. I)	General (For Stromberg-Carlson)
1V 16241 (Fig. J)	Mobile
1V 851093 (Fig. J-1)	General (Spring Loaded)
7-82540C03	General similar to J-1 (Not Spring Loaded)

Handset and Speaker Parts

T1370 AND T1380 SERIES HANDSET REPLACEMENT PARTS

PART NO.	DESCRIPTION
3S124432	Flathead screws (2 used)
15B84053A01	Switch cover
59C84058A01	Receiver cartridge
59-83272G01	Cartridge, mic.
7-83352H01	Handset bracket
40C84087A01	Switch (Black)
40C84087A02	Switch (White)
40C84087A03	Switch (Red)
40C84087A04	Switch (Blue)
40C84087A05	Switch (Beige)
40C84087A06	Switch (Green)
40C84087A07	Switch (Haze beige)
30C84057A01	Coiled cord (Black)
30C84057A02	Coiled cord (White)
30C84057A03	Coiled cord (Red)
30C84057A04	Coiled cord (Blue)
30C84057A05	Coiled cord (Beige)
30C84057A06	Coiled cord (Green)
30C84057A07	Coiled cord (Haze beige)
15C84059A01	Handset housing (Black)
15-84107A02	Handset housing (White)
15C84059A03	Handset housing (Red)
15C84059A04	Handset housing (Blue)
15-83483G05	Handset housing (Beige)
15-83483G08	Handset housing (Green)
15C84059A07	Handset housing (Haze beige)
15-84025B06	Receiver Cap (Black)
15B84054A02	Receiver Cap (White)
15B84054A03	Receiver Cap (Red)
15B84054A04	Receiver Cap (Blue)
15-83928C19	Receiver Cap (Beige)
15B84054A06	Receiver Cap (Green)
15B84054A07	Receiver Cap (Haze beige)
15B84055A01	Transmitter cap (Black)
15B84055A02	Transmitter cap (White)
15B84055A03	Transmitter cap (Red)
15B84055A04	Transmitter cap (Blue)
15B84055A05	Transmitter cap (Beige)
15B84055A06	Transmitter cap (Green)
15B84055A07	Transmitter cap (Haze beige)

Mobile Speaker Parts Kit

A complete assortment of unique hardware for repair and replacement of Motorola standard mobile type speakers. 18 items in all totaling 850 parts.

Screws, Washers, Carriage Bolts, Terminal Pins, Clamps, Etc. All parts at your fingertips when needed.

PDK-115 Speaker Hardware Kit

PERMANENT MAGNET SPEAKERS

PART NO.	SIZE	FRAME	OHMS	PWR WATTS	USED ON
50C 855098	2x2¾"	Oval	3.2	3	TU-546 Test Set
50B 893245	2½"	Square	3.2	2	H & P "Handie-Talkie" Radio
50C 82774C01	3x5"	Oval	3.2	8	Business "Dispatcher" Radio D31 & D33
50-83434B01	3½"	Square	3.2	8	Z31 & Z33 "Dispatcher" Radio
50C 800112	4"	Square	3.2	1.5	A.C. Utility
50B 475501	4½"	Round	3.2	2	P8263 Series Speakers
50C 850633	5"	Round	3.2	15	"Power Voice" Speaker & TU324A
50C852027	5"	Round	3.2	5	TSN6000A and TU324A series
50D83205B03	3"	Square	16	2	T1370A series Desk Set
50D82731G01	5"	Round	8	15	New Railroad Control Heads
50-83205B02	3"	Square	3.2	2	PT Series
50-83566E01	2¼"x6¼"	Oval	3.2	3	Monitor Rcvr
50-82929A02	3"	Square	4	8	T1370 Series
50-84561B01	5"	Square	8	15	TSN-6016B "Micor"

PAGING AND TALK-BACK SPEAKER REPLACEMENT PARTS FOR PDK-50 SERIES

Speaker Mounting Bracket Assemblies

PART NO.	USED ON
1P83151D98	PDK-501, 2, 12 and 13
1P83151D99	PDK-503, 4, 10 and 111
1P83043H99	PDK-505

Speaker Driver Assemblies

PART NO.	USED ON
50-83151D95	PDK-50-1, 12 and 14
50-83151D96	PDK-50-2, 13 and 15
50-83151D87	PDK-50-3 and 10
50-83151D88	PDK-50-4 and 11
50-83151D97	PDK-50-5 and TSN 6001A

VOICE COIL DRIVER UNIT REPLACEMENT

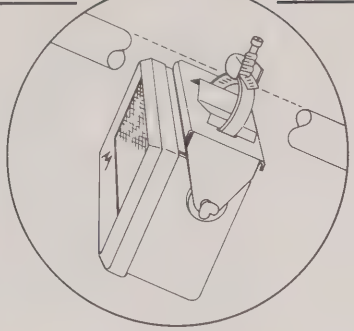
PART NO.	DESCRIPTION
50K 867784	Voice Coil/Driver Unit—Replacement Unit for Speakers—TU 259, P 8257, P 8257A, P 8257B, P 8588, P 9084.
50P83150D50	Voice Coil for TSN6009A-TSN6010A-TSN6011A

NOTE: Voice Coil **Only** is not replaceable.

SPEAKER BELL REPLACEMENTS

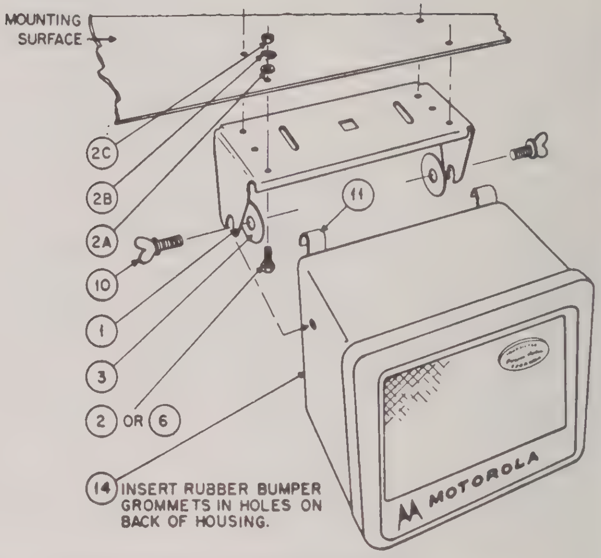
PART NO.	DESCRIPTION
15P83150D46	Round Bell for TSN 6011A
15P83150D48	Elliptical Bell for TSN6009A

Speakers



TK-395
STEERING COLUMN MOUNT
ADAPTER KIT

CONSISTS OF
42-848308 CLAMP, ADJUSTABLE
7-847998 BRACKET, CRADLE


MOUNTING SURFACE
2C
2B
2A
10
1
3
2 OR 6
11
14 INSERT RUBBER BUMPER GROMMETS IN HOLES ON BACK OF HOUSING.
MOTOROLA

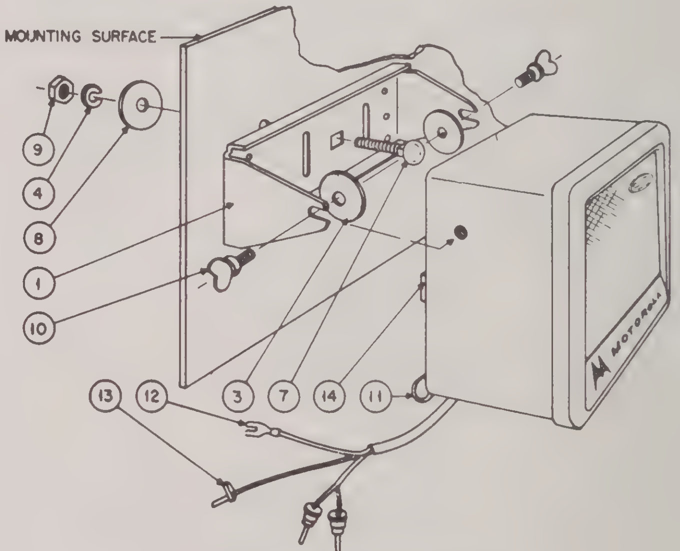
DASHBOARD TYPE MOUNTING

MOBILE SPEAKER REPLACEMENT PARTS

MODELS: TSN-6000A, TSN-6013A, TSN-6015A, TSN-6002A, TU-433A

COMMON PARTS

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	7-68484	Bracket, spkr. mounting
2	4	3-7312	Screw machine (8-32 x ¾″)
2A	4	4-7629	Washer, flat (½″ x .188 x .048″)
2B	4	4-7671	Lockwasher (#8 split)
2C	4	2-7003	Nut (8-32 x 5/16″)
3	2	4-847649	Washer, fibre
4	1	4-119331	Lockwasher (¼ split)
6	4	4-8153	Screw, self-tapping (#8 x ¾″)
7	1	3-124070	Bolt, carriage (¼-20 x 2½″)
8	1	4-122238	Washer, flat (2⅛ x .257 x .095)
9	1	2-119495	Nut (¼-20 x 7/16″ x 9/32″)
10	2	3-82278A01	Screw, wing (¼-20 x ½″)
11	2	42-80273	Clamp, cable (coated)
12	1	29-5238	Lug, soldering
13	1	29-890406	Terminal pin #6 (TU-433A)
	1	29-890404	Terminal pin #4 (TSN-6002A)
14	2	5-811898	Grommet, bumper



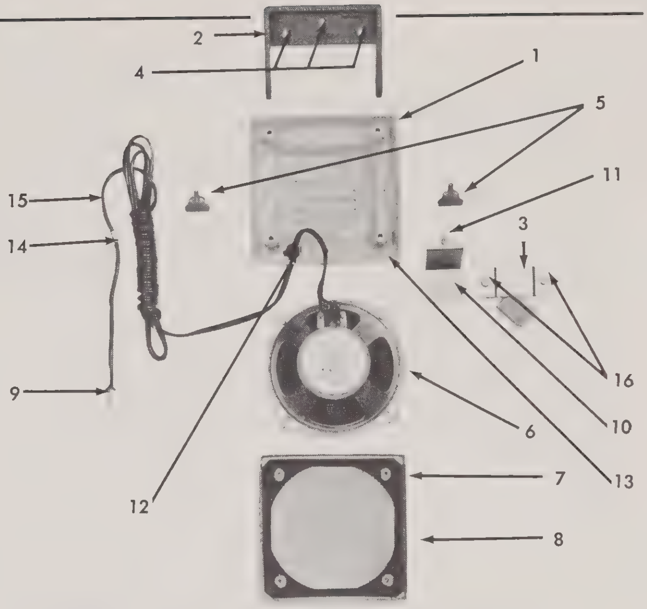
FIREWALL TYPE MOUNTING

UNIQUE PARTS

MODEL	SPEAKER	HOUSING	BEZEL	GRILL	SPEAKER GASKET	CABLE	VOL. CONT. & KNOB
TU-433A	50-850633	15-847647	13-844376	13-850572	32-844382	1-854326 (4 conductor)	
TSN-6000A	50-852027	15-857969	13-857968	13-857967	32-82123B01	1-867252 (2 conductor	
TSN-6002A	50-850633	15-857969	13-857968	13-867970	32-82123B01	1-854326 (4 conductor	
TSN-6005A	50-852027	1-80732A62	13-857968	13-857-967	32-82123B01		38-82033B14 (plug bottom)
TSN-6006A	50-852027	1-80732A62	13-857968	13-857-967	32-82123B01		18-838263 (36-858652)
TSN-6007A	50-852027	1-80732A63	13-857968	13-857-967	32-82123B01		18-838263 (36-858652)
TSN-6013A	50-852027	13-857969	13-857968	13-857-967	32-82123B01	1-80779A65	
TSN-6015A	50-850633	15-82302H05	13-83530E02	13-83053G01	32-82407B02 (2 required)	1-80704B73	

"MICOR" SPEAKER

Replacement Parts TSN-6016B and TSN-6020A



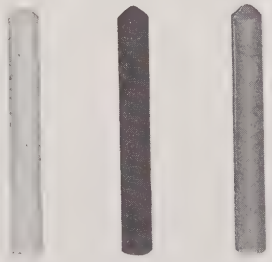
REFERENCE SYMBOL	PART NO.	DESCRIPTION
1	1-80712B91	HOUSING ASSEMBLY (rear): includes: 15-84981B01 HOUSING (rear): 3-132401 SCREW, machine: 6-32 x ⅞" Phillips round head: 4 required 42-10438A03 RING, screw retaining: 4 required
2	7-84568B01	BRACKET, trunnion
3	7-84569B01	BRACKET, wall-mount
4	3-136756	SCREW, tapping: No. 10 x ⅝" plain hex head: 3 required
5	3-84549B01	THUMBSCREW, machine: 10-32 x ⅜": 2 required
6	50-84561B01	LOUDSPEAKER, magnetic: 5" "pincushion" type: 15 Watt
7	32-84564B01	GASKET, speaker-mounting
8	13-84151C01	HOUSING, speaker (front)
9		CONNECTOR, plug: female: consists of: 14-84566B01 BODY, connector: 9-84151B01 TERMINAL, contact: 2 required
10	7-84567B01	BRACKET, hanger
11	3-121103	SCREW, machine: 6-32 x ⅜" Phillips round head
12	42-82018H05	RETAINER, cable entrance

REFERENCE SYMBOL	PART NO.	DESCRIPTION
13	33-82599D01	NAMEPLATE
14	42-84081A03	CLAMP, cable: includes "S" hook
15	1-80709B98 for TSN-6016B 1-80717B50 for TSN-6020A	CABLE ASSEMBLY: includes 8 ft. 30-83155H01 CABLE for TSN-6016B, 25 ft. for TSN-6020A 2-conductor: each conductor No. 18 ga. stranded: ("zip" cord): also includes items 9 and 14
16	3-3360	SCREW, tapping: 6-20 x ½" plain hex head: 2 required

TOUCH-UP SPRAY PAINTS, LACQUERS

For use on Motorola 2-way equipment. Handy spray cans speed touching-up mars and scratches, provide high-quality coverage, apply and dry in seconds. All available in 16-oz. cans.

PART NO.	DESCRIPTION	USED ON
11-401047	Dark Gray Lacquer	Research/G Line/ T Power both mobile and base stations
11-401048	Light Gray Lacquer	
ST-907	Aluminum	Chassis Touch Up
11-82716A01	Flat Black	Heat Sinks
11-82716A03	Drift-Wood	Motrac/Motran
11-82716A04	Blue Gray	
11-82716A09	Stellar Blue	Mocom/Motrac
11-82716A10	Valley Green	IMTS/RCC/Hospital
11-84308A11	Shadow Bronze	Micor
11-84201D72	Shadow White	Base Station
11-84201D74	Shadow Blue	Portable Charger



Vinyl Touch-Up Sticks for "Micor" Base Stations

PART NO.	DESCRIPTION	USED ON
11-84454E01	Shadow White	"Micor" Indoor Cabinet
11-84454E02	Shadow Bronze	"Micor" Indoor Cabinet
11-84454E03	Shadow Tan	"Micor" Outdoor Weatherproof Cabinet

Paint For Motorola Solid State Base Stations

Low gloss lacquers are for touch up of communication center consoles, hospital product line and outdoor pole mount base stations.

Medium or low gloss lacquers are for touch up of solid-state base station equipment (all indoor models).

PART NO.	DESCRIPTION
11-82716A05	Low Gloss Haze Beige
11-82716A07	Medium Gloss Haze Beige
11-82716A06	Low Gloss Shadow Beige
11-82716A11	Haze Beige for "SP" Consoles

Tuning Tools

(A) 66A 84645—For ¼ KW final amplifiers. Has metal blade ends; length: 8¼″.

(B) 66A 810479—Has recessed metal slot on one end; other end has ⅛″ metal screwdriver tip; length; 7¼″.

(C) 66A 835717—One end has hex body with screwdriver tip; other end has plain hex tip; length; 7½″.

(D) 66A 891488—One end has recessed metal screwdriver. Other end has metal recessed slot; length; 6″.

(E) 66A 891487—One end has metal screwdriver blade; other end has recessed metal screwdriver blade; length: 5⅝″.

(F) 66A 859078—One end has hex tip; other end has screwdriver metal blade; length; 5⅝″.

(G) 66A 863627—One end has special screwdriver tip; other end has recess metal slot; length: 4¾″

(H) 66A 824842—Both ends have 7/64″ hex tips; length; 5″.

(I) 66A 83398A01—One end has metal screwdriver blade; other end has 7/64″ hex tip; length; 5⅞″.

(J) 66A 83395A01—Both ends have 5/64″ hex tips; length; 4¾″.

(K) 66A 825015—Has special 3/32″ square end; length; 4½″.

(L) 66A 83034A01—One end has ¼″ screwdriver blade; other end has 1/16″ screwdriver blade; length; 6″.

(M) 66A 83033A01—One end has ⅛″ hex tip with screwdriver blade extended from hex tip; other end has ¼″ recessed head; length 7″.

(N) 66A 82824C01—One end has 5/16″ special metal screwdriver blade; other end has pointed 3/32″ special screwdriver blade; length: 7″.

(O) 66A 82825C01—One end has metal screwdriver blade; other end has 7/64″ hex tip; length; 7″.

(P) 66-83255C01—Has metal blade with .076″ slot on one end; other end has .021″ x .056″ screwdriver point. Length: 5″.

(Q) 66-83254C01—Has recessed metal slot on one end; other end has 3/32″ wide screwdriver blade. Length: 4¾″.

(R) 66-83256C01—One end with standard thickness metal blade and other end with double hex 5/64″ and 7/64″; length 7″.
66-83256C02—Same as above except special thin metal blade for "Micor" radio.

(S) 66-82824C04—One end has ¼″ metal screwdriver blade; other end has 3/32″ special pointed screwdriver blade; length 7⅛″.

PORTABLE EQUIPMENT

(T) 66-847036—One end has 1/16″ metal screwdriver blade; other end has recessed oval opening insulated with vinylite tubing; length; 5⅞″.

(U) 66-83137C01—One end has ⅛″ nylon screwdriver blade; other end has 3/32″ metal screwdriver blade; length; 6¼″.

(V) 66-82846D01—Has 1/16″ metal screwdriver blade; length 4″.

(W) 66-82186E01—One end has 1/16″ metal screwdriver blade; other end has ⅛″ metal screwdriver blade; length; 5⅛″.

(X) 66-835721—One end has 3/16″ screwdriver blade; other end has metal recessed slot; length, 5½″.

(Y) 66-834682—One end has ⅛″ screwdriver blade; other end has metal recessed oval opening; length; 5¾″.

(Z) 66-82824C05—3/32″ special pointed screwdriver blade; length 5½″. For "Pageboy II."

"Micor" Radio Tuning Tool Kit

Contains three tools for servicing "Micor" radios. Consists of tuning tool 66-83256C02 (Fig. R above), contact removal tool 66-84690C01, and cable routing tool 66-84953C01. Order **TLN-4301A**

"Handie-Talkie" Radio Tuning Tool Kit

An assortment of 5 tuning tools that virtually handles all Motorola's Portable "Handie-Talkie" equipment from the earliest to the most recent models. With this assortment, you receive FREE a pocket protector and 5 pencil type clips. Assortment consists of figures C, U, V, X, & Y. Order **PDK-6610**

"Motrac"/"Motran" Radio Tuning Tool Kit

Contains 3 tools for servicing "Motrac" and "Motran" series radios. Kit consists of figures P, Q & R. Order **TLN-6845A**

"Business Dispatcher" Tuning Tool Kit

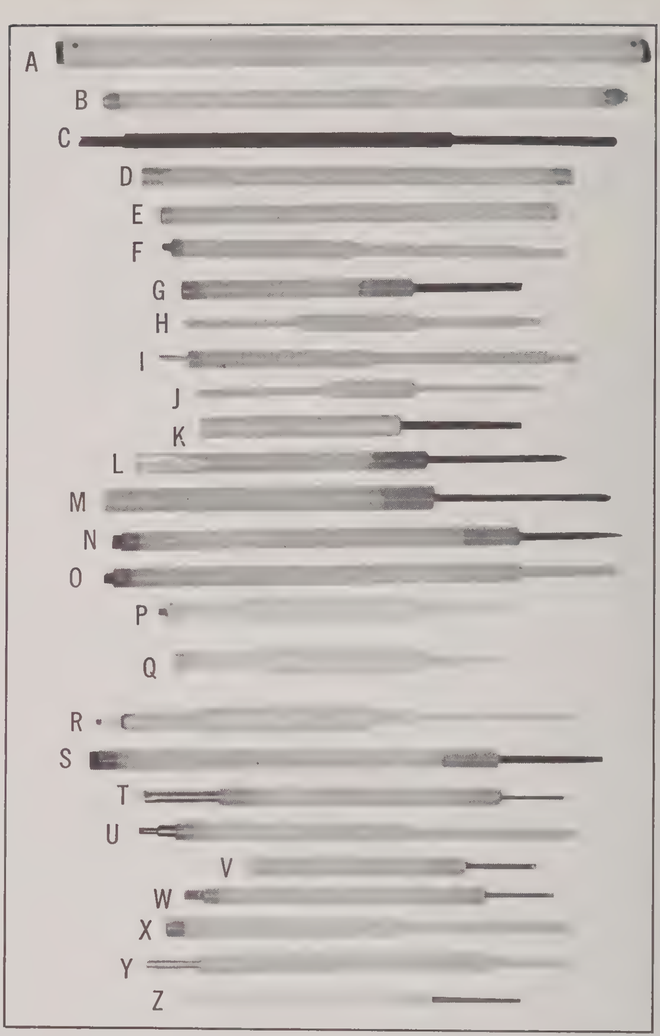
Contains 3 tools for servicing models D31 & D33BMT, CMT series of the "Business Dispatcher" radios. Consists of figures N, O & Y. Order **TLN-6658A**

Monitor Receiver Tuning Tool Kit

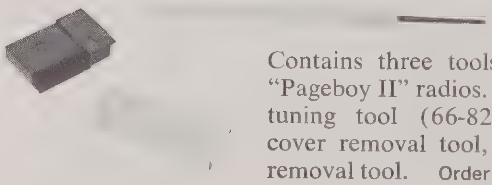
Contains 3 tools for servicing LO1 & LO3 monitor receiver series. Consists of figures H, K & Y. Order **TLN-6067A**

Standard Mobile Tuning Tool Kit

Kit consists of figures C,G & Y. Order **TK-578**



"Pageboy II" Tuning Tool Kit



Contains three tools for servicing "Pageboy II" radios. Consists of one tuning tool (66-82824C05), one cover removal tool, and one filter removal tool. Order **NLN-6968A**

Tuning Tool Kit—PDK-6612

Here's an assortment of five of the most commonly used tuning tools to meet most servicemen's routine needs. The tools are offered in a convenient pocket-carrier kit with pencil-type clips with each tool.

Order the Motorola PDK-66 selected assortment listed below or pick your own five from the tuning tools listed on this page. When selecting your own assortment, any tool may be ordered except No. 66A 84645 due to its size and limited applications. *Be sure to ask for free pocket protector and clips when ordering your own five-tool assortment.*

Motorola PDK-6612 assortment: (Y) 66A 835721, (F) 66B 859078, (G) 66A 863627, (E) 66A 891487, and (U) 66A 847036.

Car Telephone Parts

150 MHz KITS and ACCESSORIES

CABLE KITS FOR MTS AND IMTS MOBILE EQUIPMENT

MOTOROLA MODEL NO.	WESTERN ELECTRIC MODEL NO.	DESCRIPTION
TKN-6142C		Cable kit, 17 ft. negative ground. (Replaces TKN-6130B)
TKN-6142C	KS-19609-L5*	Cable kit, 20 ft. negative ground. (For Internal Supervisory Unit)
TKN-6157B		Cable kit, 20 ft. negative ground for battery saver.
TKN-6178A	KS-19609-L9*	Cable kit, 20 ft. positive ground.
TKN-6307A		Cable kit, 5 ft. for "Motrac" and "Motran" M.T.S. radio installation.
TKN-6308B		Cable kit, 20 ft. for "Motrac" and "Motran" M.T.S. radio installation.
TKN-6309A		Cable kit, 20 ft. for rear seat extension of TCN-6101A and 6111A control units.
TKN-6310A		Cable kit, 5 ft. for M.T.S. installations using TLN-8555A junction box.

*KS numbers include TLN6969A cable connectors and cover.

CIRCUIT BOARDS FOR CAR TELEPHONE

Following used on TLD 1100A radio:

KIT NO.	DESCRIPTION
TLN-6620B	Channel element socket board
TLN-6621B	1st I.F. (5.26MC)
TLN-6622B	Multiplier and audio board
TLN-6623B	455KC I.F. Amplifier
TLN-6626B	Digital Selector
TLN-6628A	Diplexer
TLD-6290B	Pre-selector
TLD-6300B	Transmitter exciter board

MISCELLANEOUS MOBILE KITS

MOTOROLA MODEL NO.	DESCRIPTION
TLN-6588A	Shelf mount kit—for shelf mounting TLN-1100A units in auto trunk.
TLN-6042A	Installation kit—for car telephone radio unit.
TLN-6629B	Tuning tool kit for TLN-1100A radio.
TLN-6903A	Hardware kit—adapts TLN-1100A radio to use TLN-6626B Selector.
TLN-6934A	IMTS dial control head unit installation hardware and cable connector housing.
TLN-6971A	IMTS dial control head unit supplementary hardware.
TLN-6969A	Cable connector housing and cover.
TLN-6582A	Auxiliary ring relay kit replacement for MTS control
TLN-8554A	Junction Box for use with "Motrac" and "Motran" M.T.S. radio installations.
TLN-8555A	Junction Box for use with "Motrac" and "Motran" M.T.S. radio colored control units.
TLN-1039A	Digital Selector used in "Motrac" and "Motran" M.T.S. radio installations.
THN-6045A	Weatherproof Housing for mobile radios (TLD1100 type radio and MTS control head.)
TLN-6588A	Shelf Mount Kit consists of hardware for shelf mounting TLD1100 radio units in auto trunk.
TLN-6692A	Hump Mount Kit for installing TCN1022 type control heads on hump in front floor of vehicle.

MOBILE ANTENNAS

MOTOROLA MODEL NO.	DESCRIPTION
TAE-6010A	450-470 coaxial antenna for cab or bumper
TAD-6113A	152-174 MHz rooftop antenna, unity gain.
TAE-6020A	450-470 coaxial antennas, has extra long support mast for mounting on large trucks.
TAD-6042A	150-162 MHz Coaxial antenna—for cab or bumper mount.
TAD-6043A	162-174 MHz Coaxial antenna—for cab or bumper mount.
TAE-6062A	450-470 5 dB gain antenna.
TAE-6072A	450-470 rooftop high gain ant.
TLN-6182A	Side mounting kit for coaxial antenna.
TLN-6414A	Bumper mounting kit for coaxial antenna.

MK-450 MHz IMTS KITS and ACCESSORIES

CIRCUIT BOARDS FOR MK AND 450 MHz RADIO UNITS

MOTOROLA MODEL NO.	DESCRIPTION
TLE-1130A	Power Amplifier
TFE-6030A	Duplexer Filter
TFE-6040A	Pre-Selector
TLN-8827A	Socket Board Regulator
TLN-8828A	1st IF & 2nd Oscillator
TLN-8829A	Multiplier Board
TLN-8833A	Audio Board
TLN-8954A	Exciter Board
TLN-8955A	470 kHz IF Board

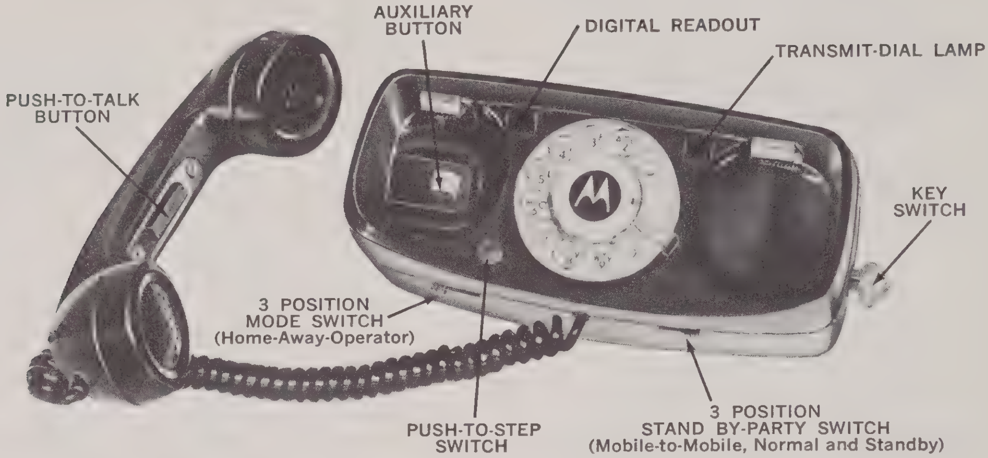
MOBILE EQUIPMENT

MOTOROLA MODEL NO.	WESTERN ELECTRIC MODEL NO.	DESCRIPTION
TKN-6370A	KS-20282-L5	20 ft. cable assembly, negative ground.
TLN-8909A	KS-20282-L9	Tuning tools.
TLN-6042A	None	Installation Kit.

CONTROL HEAD EQUIPMENT

MOTOROLA MODEL NO.	WESTERN ELECTRIC MODEL NO.	DESCRIPTION
TLN-4002A	KS-20283-L2	Auxiliary mounting bracket.
TLN-4026A	KS-20283-L4	Standard control head mounting hardware.
TLN-4129A	KS-20283-L5	Cable connector clip.
None	KS-20283-L3	Housing kit (excl. handset); use suffix (—) to indicate color: —3 (blk), —60 (beg), —51 (grn), —61 (gray), and —58 (wht).

Replacement Parts for FACTS Control Head


AUXILIARY BUTTON
DIGITAL READOUT
TRANSMIT-DIAL LAMP
PUSH-TO-TALK BUTTON
KEY SWITCH
3 POSITION MODE SWITCH (Home-Away-Operator)
PUSH-TO-STEP SWITCH
3 POSITION STAND BY-PARTY SWITCH (Mobile-to-Mobile, Normal and Standby)

PART NO.	DESCRIPTION
3-138621	Screw, tapping: 4-40x⅝ hold down snap action sw.
3-131281	Screw, machine: 6-32x⅜ hold down chassis.
3-134169	Screw, tapping 4-40x¼ push button "aux. switch" dig. readout brkt.
3-2294	Screw, machine 6-32x½ for M9267 transistor.
3-122810	Screw, tapping 2-56x¾ "readout assem."
3-840892	Screw, machine 8-32x⅜ chassis hold down.
3-124432	Screw, machine 4-40x¼ plate cover for push button on hand set.
3-138162	Screw, tapping 4-40x⅜ hold circuit coil.
3-84221D01	Screw, machine 10-32x13/16 (back sec. of housing).
3-1937	Screw, machine 4-40x5/16.
3-115613	Screw, machine 4-40x¼ used on interconnect mtg. board.
3-8022	Screw, machine 4-40x¼ used to hold down slide switch.
4-1720	Washer.
4-7562	Washer.
4-474215	Washer, insulating.
4-129021	Lockwasher, ¾" used on lock and key switch.
4-851702	Washer, insulating to fit above spacer.
5-84241D01	Grommet
5-3144	Eyelet (used on screw guide.)
7-84217D01	Bracket, used on hand set "hang-up."
7-84236D01	Bracket, used on "readout mounting."
7-84292D01	Bracket, switch mounting.
7-84222D01	Bracket, switch mounting.
7-84215D01	Transistor, mounting bracket.
7-84199D02	Trunnion bracket (right).
7-84199D01	Trunnion bracket (left).
9-863753	Transistor socket, 2 contact.
15-84236D01	Display screen, used on digital readout mounting.
15-84053A01	Cover plate, for handset push button.
15-84223D02	Dust seal, for trunnion bracket (right).
15-84223D01	Dust seal, for trunnion bracket (left).
15-84227D01	Insulator (connect dust cover).
26-84290D01	Reflector, light.
26-84239D01	Radiator, heat sink.
26-84457D01	Transistor, heat sink plate.
29-84547B01	Contact, male } Connector plug
42-84232D01	retainer
38-84296D01	Push button, switch ("aux").
38-84264D01	Push button, PTT.
40-84230D01	Switch, snap-action; Spdt.
40-84291D01	Switch, mode, slide 3 position, lock all positions.

PART NO.	DESCRIPTION
40-84291D02	Switch, stand by party, slide 3 position momentary lock.
40-83987H01	Lock switch, SPST, includes key (Part No. 55-82000H02 for 2252 key).
40-84087A01	Push button switch used on (push to stepup).
40-84087A05	Beige.
40-84087A02	White.
40-84087A09	Gray.
40-84087A06	Green.
41-84218D01	Spring, (handset hang-up clamp).
41-84220D01	Spring, (screw retractor).
42-83946H01	Clamp, handset "hang-up."
42-10219A10	Retainer ("C washer").
42-84232D01	Retainer (connector locating guide).
43-84219D01	Spacer.
42-84284B01	Retainer (screw captivator).
47-83920H01	Hinge pin, hang-up clamp.
51-84312B52	Network ringer.
54-83823D01	Card for dial.
55-82000H02	Key 2252.
59-84058A01	Receiver drop-in element cartridge.
59-84427D01	Transmitter drop-in element cartridge, does not include 42-84426D01 holding cup.
61-84212D01	Lens indicator light ("T").
65-138555	Lamp, .06A, 5V, No. 683 used on digital readout and transmit dial.
72-83969H01	Dial, note does not include 54-83823D01 card for dial.
59-813674	Relay, external, used for applications when external signal is desired.
TLN-1443	Supervisory unit—contains full IMTS (1800/2000 Hz) signalling plus 2805 Hz dial encoder and decoder.
TLN-1442	Supervisory unit—contains a 2805 Hz dial encoder and a 2850 Hz decoder.
TLN-1034SP2	Supervisory unit—contains a full IMTS (1800/2000 Hz) signalling and 2805 Hz decoder only.
TKN-6475A	Cable kit (neg. grnd.) for 450 Hz radio unit.
TAE-6052A	Antenna kit (450-470 MHz).
THN-6083A	Housing kit for (450 MHz)
TLN-8838A	Nameplate, Motorola. (33-83681H01) (450 MHz)
TKN-6475A	Cable kit (neg. grnd. for 150 MHz).
TAD-6113A	Antenna kit (152-162 MHz).
TLN-6889A	Nameplate, Motorola. (33-83006A01) (450 MHz)
	HOUSING
TLN-4002A	Mounting bracket.
TLN-4654A	Universal mtg. bracket for wider range positioning.

CONVERSION KITS FOR FACTS CONTROL HEAD UHF AND VHF

MODEL NO.	HOUSING (FRONT SEC.)	HOUSING (BACK SEC.)	CORD	HANDSET
TCN-1101A (Blk.)	15-84234D01	15-84233D01	30-84057A01	15-84107A01
TCN-1102A (Beige)	15-84234D02	15-84233D02	30-84057A05	15-84107A05
TCN-1103A (Wht.)	15-84234D03	15-84233D03	30-84057A02	15-84107A02
TCN-1104A (Gray)	15-84234D04	15-84233D04	30-84057A09	15-84107A08
TCN-1105A (Grn.)	15-84234D05	15-84233D05	30-84057A06	15-84107A06

IMTS TERMINAL

FREQUENCY RESPONSIVE SWITCH (FRITCH)

FREQUENCY	PART NUMBER
Decimonic Ringing	
20 Hz	1-84180D01
30 Hz	1-84180D02
40 Hz	1-84180D03
50 Hz	1-84180D04
60 Hz	1-84180D05
Harmonic Ringing	
16⅔ Hz	1-84180D06
25 Hz	1-84180D07
33½ Hz	1-84180D08
50 Hz	1-84180D04
66⅔ Hz	1-84180D09
Synchromonic Ringing	
16 Hz	1-84180D10
30 Hz	1-84180D02
42 Hz	1-84180D11
54 Hz	1-84180D12
66 Hz	1-84180D13

IMTS CONTROL TERMINALS

IMTS LINE CIRCUIT ADD-ON KIT SERIES

The line circuit add-on kit provides the necessary equipment to add one additional line circuit to the IMTS control terminal. 12 line circuits can be mounted in the 1st bay of the terminals and 48 in the 2nd bay for a total of 60 line circuits. Expansion of alloter circuit is necessary after 12 lines. See TDN 6027 Line Alloter Kits.

TDN 6024A	Line Kit—for 1 to 10 parties per line.
TDN 6024B	Mounting kit for adding line circuits 6 through 10 only. All other mounting bars are included in the terminal.

LINE ALLOTER KITS

Required when using more than 12 lines. Order one for each group of 12 lines. Mounts in second bay (TDN 6030A). A.T.B. relays are included.

TDN 6027AA	For addition of lines 13 to 24 (4 relays).
TDN 6027AB	For addition of lines 25 to 36 (7 relays).
TDN 6027AC	For addition of lines 37 to 48 (2 relays) or for the addition of lines 49 to 60 (2 relays).

ADDITIONAL TERMINAL EXPANSION KITS

TDN 6030A SECOND BAY ASSEMBLY—Includes basic framework, stile, cover and panels, cabling for lines 13-48 and terminal block. When the TDN 6030A is not mounted adjacent to 1st bay, order TDN 6046A end cover.

TDN 6031A RACK EXTENSION KIT—Includes channel iron and necessary hardware to extend Standard Terminal Rack to 11′6″ high. Complete with necessary covers and side panels. One per bay may be ordered as required.

TDN 6032A RECEIVER TEST JACK KIT—Provides necessary jacks, switch and lamp to test and monitor an additional receiver. One required for each additional receiver in excess of two receivers per channel.

TDN-6029A TOLL TICKETING STATION CONTROL CIRCUIT FOR 120 SUBSCRIBERS—Provides interconnection between terminals and any automatic toll ticketing identifiers. One per channel required and may be mounted externally or in TDN 6031A.

TDN 6034A TOLL TICKETING STATION CONTROL CIRCUIT FOR 120 SUBSCRIBERS—Same as the TDN 6029A, but designed for mounting in TDN 6030A.

TDN 6036A LINE TERMINATION PRINTED CIRCUIT CARD KIT—Provides receiver plug additions for the transmission. One required for each additional receiver in excess of one on a one channel terminal and two for two channel terminal.

TDN 6037A MULTI-OFFICE DIRECTOR—Provides equipment necessary to operate the IMTS System with mobile subscriber assignments in more than one central office. One required per system.

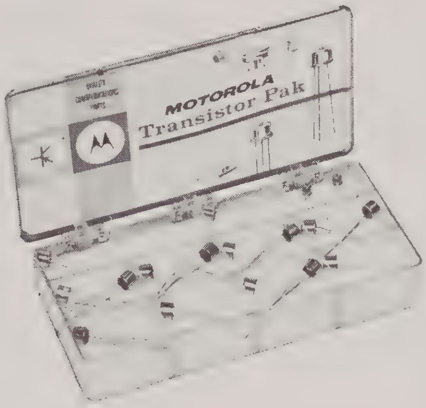
TDN 6042A TIE CABLE KIT—A formed, stripped, and laced cable for connecting adjacent equipment bays. Will be factory installed when ordered with the TDN 6030A.

150 MHz BASE STATION

FIELD CONVERSION KITS FOR IMTS BASE STATION

MODEL NO.	DESCRIPTION
T 1296A	Field Conversion Kit—for adding forward and reflected power meters in 250 watt IMTS Base Stations.
T 1297A	Field Conversion Kit—for adding forward and reflected power meters in 50 watt IMTS Base Stations.
T 1356A	Field Conversion Kit—for adding ferrite isolator in 250 watt IMTS stations.

Parts Kits... Transistor Kits for IMTS Radio Equipment



MODEL NUMBER	DESCRIPTION
	MOBILE
PK106A*	For servicing TLD1000 Radio Unit. A comprehensive assortment of spare components and most commonly used parts for trouble shooting and replacement. Does not include transistors, control unit parts, tubes, fuses or common capacitors and resistors. Transistor kits for the mobile unit and selectors are listed below.
PK108*	Kit consists of full complement of tubes, fuses and bulbs for maintenance of 150 MHz units.
PK118*	43 piece assortment of 25 transistors and 18 diodes used in 150 MHz units.
PK119*	18 piece transistor kit, for servicing Digital Selector (TLN6626). Kit contains one or more of each transistor used in these models.
PK120	24 piece transistor kit, for servicing the Supervisory Unit (TLN1034). Kit contains one or more of each transistor used.
PK183*	Diode kit, contains one or more of all the diodes used in the 150 MHz Mobile Radio unit including digital and supervisory package. Kit contains 21 diodes of eight different types to completely service diode replacements in the mobile unit.
PK251	Miscellaneous parts kit for the TLN1034 includes diodes and repair parts not usually stocked.
PK252**	Semi Conductor parts kit, for the MK mobile radio including at least one of all transistors and diodes used in this unit.
PK253**	Miscellaneous parts kit for the MK mobile radio, includes repair parts not usually stocked.
	BASE STATION
PK121*	Base Station Receiver Kit. A complete assortment of spare components consisting of one or more unique parts most often used for trouble shooting and replacement. Does not include transistors and tubes, or common capacitors and resistors.
PK122*	19 piece Transistor Kit for servicing Base Station Receiver and associated chassis. Kit contains one each of all transistors in the equipment.
PK123*	Base Station Transmitter Kit (Low-Power). An assortment of components for servicing the Low-Power transmitter. Kit contains one or more of all unique parts most often used for trouble shooting and replacement operations. Kit does not contain transistors, tubes, fuses or common resistors and capacitors.
PK124*	Base Station Transmitter Kit (High-Power). Same type of kit as described in PK123 only components are for High-Power transmitter.
PK125*	12 piece Transistor Kit for servicing the Base Station Transmitter. Kit contains one of all transistors used in transmitter chassis.
PK126*	An assortment of eight types of glass tubular fuses for maintenance of the 50 Watt base station transmitter. Kit contains 5 each of fuses in XMTR cabinet.
PK127*	An assortment of seven types of glass tubular fuses for maintenance of the 250 Watt base station transmitter. Kit contains 5 each of fuses in XMTR cabinet.
PK128*	A fuse kit for maintenance of base station receiver cabinet. Kit contains five each glass tubular fuses used in receiver cabinet.
PK129*	A full complement of tubes for maintenance of 50 Watt and test transmitter base stations.
65-83382D02*	A tube kit required in addition to the PK129 kit to provide the proper tube complement to service the 250 Watt base station transmitter. (Replaces PK-134).
PK210**	MK Base Station Receiver Kit, a miscellaneous parts kit of items not usually stocked or available locally.
PK205**	Transistor Kit, for MK Base Station Transmitter, contains at least one of all transistors used.
PK206**	Fuse Kit for MK Base Station, contains at least one of all fuses in MK base receivers and transmitters.
PK208**	Tube Kit for MK Transmitter, contains one of each tube used in the MK transmitter.
PK209**	Diode Kit for MK Base Station Receiver Kit, contains at least one of all diodes used.
PK254**	Transistor Kit for MK Base Station Receivers, contains at least one of all transistors used.
PK255**	Diode Kit for MK Base Station Transmitter, contains at least one of all transistors used.
PK256**	MK Base Station Transmitter Kit, a miscellaneous parts kit of items not usually stocked or available locally.
	CONTROL TERMINAL
PK180	A recommended assortment of replacement diodes for the control terminal boards of the IMTS terminal unit. This contains 20 diodes of 12 different types to completely service diode replacements for the 10 card system.
PK181	A recommended assortment of replacement transistors for the control terminal boards. This kit contains 20 transistors of 8 different types to completely service transistor replacements for the 10 card system.

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*150 MHz Equipment only.

**450 MHz Equipment only.

Car Telephone Parts

IMTS CONTROL TERMINAL PARTS

MOTOROLA PART NO.	DESCRIPTION	I.T.T.
VARISTORS		
6P83966B69	Coded Brown	80390-1
6P83966B70	Coded Yellow	80390-2
6P83966B71	Coded 29HT	95655-1
SUPPRESSORS		
6P83131C63	600 Ohm, .5 uf	96032-1
6P83966B72	.2 uf, 100 Ohms	4A-784
6P83996B73	.5 uf, 600 Ohms	5A-784
6P83966B74	1 uf, 600 Ohms	5B-784
6P83966B76	Suppressor Assembly	77502
ATTENUATOR		
9P83131C52	Pad Socket Assembly	86673-1
SWITCHES		
40P83131C38	Turn Button	95727-3
40P83131C50	Turn Button	95727-9
40P83131C53	Lever	1242-740
40P83131C54	Lever	1013-740
40P83131C55	Lever	1252-740
40P83131C56	Lever	1019-740
40P83131C64	Lever	1031-740
40P83131C65	Lever	1001-740
40P83131C66	Hook Switch	86575-1
HANDSET		
50D83449A01	Handset	—
SHELF CARDS		
1P83966B78	Hybrid Card	K-5402
1P83966B79	Vogad Control Card	K-5403
1P83966B80	Vogad Amplifier Card	K-5404
1P83966B81	Transmit Line Terminating Card	K-5405
1P83966B82	Tone Generator Card	K-5406
1P83966B83	Receive Line Terminating Card	K-5407
1P83966B84	Receiver Selector B Card	K-5408
1P83966B85	Receiver Selector A Card	K-5409
1P83966B86	Sonad Card	K-5410
1P83966B87	Tone Detector A Card	K-5411
1P83966B88	Tone Detector B Card	K-5412
1P83966B89	Band Pass Filter Card	K-5414
1P83966B90	Transmit Line Terminating Card	K-5405-GP2
1P83966B91	Transmit Line Terminating Card	K-5405-GP3
1P83966B92	Amplifier Card	95769-1
LAMPS		
65P83966B94	Switchboard, 48 V	4896-TD-745
65P83966B96	Glow Type, NE83	95766-1
65P83966B97	Resistance Type 13J	76893-2
65P83966B98	Resistance	76893
THERMISTOR		
6P83966B68	45B2	79641-3
COILS—Relay		
25P83966B01	308/308	P-2
25P83966B02	485 Ohms	S-6
25P83966B03	1000 Ohms	S-8
25P83966B04	1075 Ohms	S-9
25P83966B05	2000 Ohms	S-25
25P83966B07	3600 Ohms	S-10
25P83966B08	334 Ohms, 1/16" Sleeve	S-26
25P83966B09	540 Ohms, SL	S-27
25P83966B11	1235 Ohms	S-35
25P83966B12	815 Ohms	S-36
25P83966B13	1000 Ohms SL	S-38
25P83966B14	2550 Ohms	S-46
25P83966B15	10260 Ohms	S-50
25P83966B16	2220 Ohms Slug	S-51
25P83966B19	830 Ohms, 1/16" Sleeve	S-69
25B83966B20	545 Ohms	S-78
25P83966B22	390 Ohms	S-80
25P83966B23	225/225 Ohms	T-2
25P83966B24	1025/1025 Ohms	T-3
25P83966B25	515/515 Ohms	T-9
25P83966B26	2220/2220 Ohms	T-11
25P83966B29	830/830 Ohms	T-21
25P83966B30	1025/2220 Ohms	T-28
25P83966B31	515/830 Ohms	T-40
25P83966B33	1025/515 Ohms	T-52
25P83966B34	830/1310 Ohms	T-70
25P83966B35	830/410 Ohms	T-71
25P83966B36	Repeat Coil	80683-1
25P83966B37	Induction Coil	95768-1
25P83966B42	1050/1050 Ohms SL	T-48
RELAYS		
80P83966B43	Mercury	95694-1
80P83966B44	Magnetic Impulse	74566-4
80P83966B46	Multi-Stack Relay	80329-37
80P83966B48	Ringing Relay (60 CPS)	20570A2
80P83966B49	Ringing Relay (30 CPS)	20570A3
80P83966B50	Ringing Relay (40 CPS)	20570A4
80P83966B51	Ringing Relay (50 CPS)	20570A5
49P83966B99	Matrix Shorting Discs	86759-1
THERMAL TIMING ELEMENTS		
80P83966B39	20 Sec., 48 V	82222-3
80P83966B40	45 Sec., 48 V	82222-5
80P83966B41	120 Sec., 48 V	82222-8
48P83131C44	Use 48P82466H02 V2070	83777-22
48P83131C57	Zener—IN281113R-13V-50W	—

REPLACEMENT PARTS FOR 150 MHz IMTS CONTROL HEADS

MOTOROLA PART NO.	DESCRIPTION
7P83471A01	Bracket, Mounting
42P83471A02	Ring, Lockout
40P83471A03	Switch, Aux. Push Button
40P83471A04	Switch, Channel Selector
80P83471A05	Relay (ring)
80P83471A06	Bell & Diode Assy.
40P83471A07	Switch, Lock (with 2 keys)
18P83471A08	Potentiometer
30P83471A09	Cable Assembly
40P83471A10	Cradle Switch Assy.
33P83471A11	Name Plate Assy., W. E. Co.
54P83471A12	Strip, Number Card
33P83471A13	Name Plate Assy., "Radio Tele."
80P83471A14	Relay—for revertive call
80P83471A15	Buzzer
38P83471A16	Push Button Assy. (JL)
38P83471A17	Push Button Assy. (YL)
38P83471A18	Push Button Assy. (JP)
38P83471A19	Push Button Assy. (YP)
38P83471A20	Push Button Assy. (YJ)
38P83471A21	Push Button Assy. (YK)
38P83471A22	Push Button Assy. (JS)
38P83471A23	Push Button Assy. (YS)
38P83471A24	Push Button Assy. (YR)
38P83471A25	Push Button Assy. (JK)
38P83471A26	Push Button Assy. (JR)
38P83471A27	Push Button Assy. (H)
38P83471A28	Push Button Assy. (M)
38P83471A29	Push Button Assy. (R)
38P83471A30	Push Button Assy. (Aux)
38P83471A31	Push Button Assy. (No Designation)
38P83471A32	Push Button Assy. (P)
42P83471A33	Clamp (LH)
42P83471A34	Clamp (RH)
41P83471A35	Springs, Clamp
47P83471A36	Pivot Pin, Clamp
45P83471A37	Actuator Arm Assy.
41P83471A38	Spring for Actuator Arm
41P83471A39	Spring (Large for Cradle Switch)
7P83471A40	Cradle Switch Bracket Assy.
9P83471A41	Relay Socket Assy. (Ring)
43P83471A42	Retainer, Relay Ring
2P83471A51	Speed Nut, "U" Type
32P83471A52	Dial Gasket
46P83471A53	Dial Finger Stop
26P83471A54	Light Shield
7P83471A55	Dial Light Mtg Brkt
7P83471A56	Lamp Mtg Brkt (Trans-Busy)
9P83471A57	Lamp Socket Assy. (On-Off)
65P83471A58	Lamp (Miniature bay base)
7P83471A59	Mtg Brkt Assy. (Base Plate) RH
7P83471A60	Mtg Brkt Assy. (Base Plate) LH
59P865086	Transmitter Assy. (Handset)
59P83471A63	Receiver Assy. (Handset)
13P83471A66	Escutcheon (Handset)
41P83471A68	Restoring Spring Handset
40P83471A69	Switch Assy. Handset
59P83471A70	Membrane Assy. Handset
3P83471A71	Flat Head Cap Screw (Handset)
80P83471A72	Bell Assy. (includes Mtg Screws and Diode)
80P83471A73	Bell
30P83471A74	Cable Assy.
33P83471A75	Nameplate Assy. (Motorola)
61P83471A76	Lens (Transmit)
61P83471A77	Lens (Busy)
65P83471A78	Edge Light
40P83471A79	Switch, Party
3P83471A80	Screw (Top of Fr. Shell)
3P83471A81	Screw (Bottom of Fr. Shell)
3P83471A82	Screw (Rear Shell)
42P83471A83	Tie (Nylon)
80P83471A84	Buzzer Assy.
80P83471A85	Buzzer Only
48P83471A86	Diode
4P83471A87	Insulator
3P83471A88	BHM Screw (Buzzer Mtg)
9P83471A89	Relay Socket Assy.
42-4004A01	Retainer, Relay Replaces 43-83471A90
48P83471A91	Diode, CR 2
72-83969H01	Kellogg Dial Assy. Replaces 80-83531A02
49-83150D25	Fingerwheel

REPLACEMENT PARTS FOR 450 MHz CONTROL HEADS

PART NUMBER	DESCRIPTION
40-83987H01	Switch, lock with 2 keys
55-82000H02	Key
80-04357C07	Relay
9-04003A03	Relay Base
40-83970H01	Switch, push (Aux)
1-80788A23	Assembly Pushbutton (Aux)
40-83977H01	Switch, open leaf
40-83972H01	Switch slide (DPDT) light dimmer
72-83969H01	Dial Assembly, complete
18-83930D08	Potentiometer 10K
80-83973H01	Bell
1-80788A18	Latch bar assembly
65-83974H01	Indicator Lamp
7-83951H01	Bracket left mounting
7-83951H02	Bracket right mounting
28-863762	Plug chas 24 pin
7-83938H01	Mounting trunnion
31-83949H01	Terminal Board
31-83952H01	Terminal board TB2
31-83916H01	Terminal Board TB4
54-83823D01	Dial Card

Microwave, Point-to-Point Spare Parts

SPARE BOARDS: MR-600, MR-200 RF EQUIPMENT

MODEL NO.	MR-600	MR-200	DESCRIPTION
MB254	X		Receiver, AFC
MB229	X	X	Pilot Receiver
MB228	X	X	Transmitter Control
MB230	X	X	Receiver Control
MB231	X	X	Baseband Switch
MB251	X	X	RF Control
MB250	X	X	Monitor Board
MB250/A	X	X	Monitor Board
MB250/B	X	X	Monitor Board
MB250/C	X	X	Monitor Board
MB253	X	X	Squelch Receiver
MB232	X	X	Squelch Control
MB252	X	X	Dry Contact Relay Alarm Board (2 Relays N/O)
MB252/A	X	X	Dry Contact Relay Alarm Board (4 Relays N/O)
MB252/B	X	X	Dry Contact Relay Alarm Board (4 Relays N/C)
MB255	X	X	Driver Board, (Power Supply)
MB256	X	X	Regulator Board, (Power Supply)
			FOR MA364 BASEBAND ORDERWIRE
MB183A	X	X	Signaling Oscillator & Receiver
MB184A	X	X	Baseband Transmitter
MB185A	X	X	Baseband Receiver

SPARE BOARDS: MB, MC-30 MULTIPLEX

MODEL NO.	DESCRIPTION
MB169A	Transmitter
MB169Z	Transmitter
MB170Z	Receiver
MB171	Signaling Termination, V1
MB172	Signaling Termination, V2
MB173	Signaling Termination, V3
MB174	Signaling Termination, V4
MB175	Signaling Termination, V5
MB177	Signaling Termination, V7
MB178	Signaling Termination, V8
MB179	Signaling Termination, V9
MB180	Signaling Termination, V10
MB181	Signaling Termination, V11
MB214	Receiver

SPARE BOARDS: MB
MC-300A SSBSC MULTIPLEX (HI-DENSITY)
ML-300I SSBSC MULTIPLEX (LO-DENSITY)

MODEL NO.	MC-300A	MC-300I (4-52kHz)	MC-300I (60-108kHz)	MC-300I (312-552kHz)	DESCRIPTION
MB220	X	X	X	X	Modem Card
MB221	X	X	X	X	Signaling Card
MB222	X	X	X	X	2W/4W Termination Card (P/O V12W)
MB238	X				Group Modem Assembly (G1-G5)
MB239	X				3825 Hz Signaling Supply
MB242	X				Base Group Modem Card (Non-Redundant)
MB243		X	X	X	Channel Oscillator/Board (with Jackfield)
MB244				X	Group Oscillator Signaling Generator Board.
MB245				X	Group Oscillator Board
MB247		X			Low Group Oscillator/Signaling Board
MB258	X				Group Carrier Amplifier Card
MB260	X				Supergroup Carrier Amplifier Card
MB268	X				Group Modem Amplifier Card (Redundant)
MB270	X				Group Demod Amplifier Card (Redundant)
MB273	X				Line Amplifier Card

SPARE UNITS: MU, MR-600, MR-200 RF EQUIPMENT

MODEL NO.	MR-600	MR-200	DESCRIPTION
MU525	X		Output Power Monitor/Crossguide Coupler
MU508		X	Modulator Oscillator
MU509		X	RF Amplifier
MU514		X	2 GHz Multiplier
MU516		X	Mixer/Pre IF Amplifier (All 2 GHz Bands)
MU517		X	Rcvr. Local Oscillator
MU518	X	X	Xmtr. AFC
MU526		X	RF Amplifier
MU527		X	2 GHz Mult.
MU528		X	Modulator-Oscillator
MU557		X	Xmtr. AFC
MU590	X	X	IF Amplifier (All Bands)
MU591	X	X	2 GHz Multiplier
MU593	X	X	Modulator-Oscillator
MU594	X	X	RF Amplifier
MU598		X	Rcvr. Local Oscillator

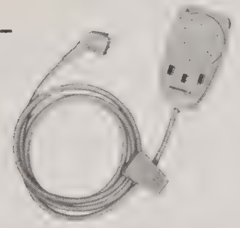
SPARE KITS: MK, MR-200, MR-600

MODEL NO.	MR-200	MR-600	DESCRIPTION
MK342	X	X	75 ohm BNC Connector
MK857	X	X	Squelch Relay
MK1060	X		Meter Panel & Cable
MK1068		X	Tunnel Diode Amplifier
MK1081	X		Coax Adapter
MK1082		X	Meter Panel & Cable
MK1158TB(1-9)	X	X	Pwr/Alarm Termination Panel
MK1139TB( )	X	X	Power Distribution Panel

SPARE KITS: MK
MC-300A SSBSC MULTIPLEX (HI-DENSITY)
MC-300I SSBSC MULTIPLEX (LO-DENSITY)

MODEL NO.	MC-300A	MC-300I (4-52 kHz)	MC-300I 60-108 kHz 312-552 kHz	DESCRIPTION
MK556 (Use MK1124)				
MK778	X	X	X	Signaling Converter (p/o V10)
MK928A	X	X	X	Channel Modem Filter (CH 1—12)
MK929A	X	X	X	Coil Hybrid
MK932A	X	X	X	Signaling Converter (p/o V2)
MK933	X	X	X	Signaling Converter (p/o V3)
MK934	X	X	X	Signaling Converter (p/o V4)
MK935	X	X	X	Signaling Converter (p/o V5)
MK936	X	X	X	Signaling Converter (p/o V6)
MK937	X	X	X	Signaling Converter (p/o 2w V1, V7, V8).
MK938	X	X	X	Signaling Converter (p/o V8)
MK939	X	X	X	Signaling Converter (p/o V9)
MK1007	X	X	X	Signaling Adapter (p/o V3, V6, V9 with coil hybrids)
MK1037	X	X	X	Signaling Adapter (p/o V2, 4w)
MK1040	X			Channel Carrier Filter (CH 1—12)
MK1041	X			Group Carrier Filter (G 1—5)
MK1045A	X	X	X	Resistive Hybrid
MK1050	X	X		Basegroup Filter
MK1057		X		Low Group Filter (52kHz)
MK1122 (S3-10)	X			Supergroup Carrier Filter (Sgrp 3-10)
MK1123 (S1)	X			Supergroup Modem Filter (Sgrp 1)
MK1123 (S2)	X			Supergroup Modem Filter (Sgrp 2)
MK1123 (S3)	X			Supergroup Modem Filter (Sgrp 3)
MK1123 (S4-10)	X			Supergroup Modem Filter (Sgrp 4-10)
MK1124-GB	X			Basegroup Modem Filter
MK1124-(G1-5)	X			Group Modem Filter (Group 1-5)

Hospital "Tele-Mike" – Program Speaker Parts



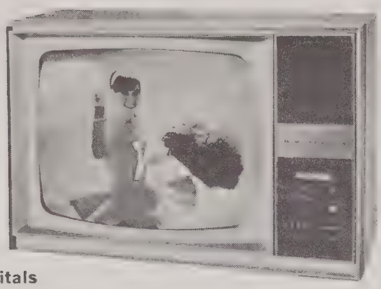
PROGRAM SPEAKERS

"TELE-MIKES"

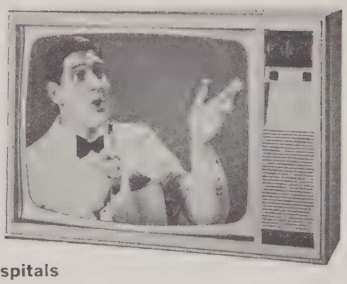
	HSN-6000AA	HSN-6000AB	HSN-6007BA	HSN-6032BA	HSN-6032BB	HSN-6033AA	HSN-6033AB	HSN-6061BA	HSN-6061BB	HST-6001AA	HST-6001AB	HST-6008AA	HST-6008AB	HST-6059AA	HST-6059AB	HSN-6002CA	HSN-6002CB	HSN-6002CC	HSN-6002CD	HSN-6004CA	HSN-6004CB	HSN-6004CC	HSN-6005CA	HSN-6005CB	HSN-6005CC	HSN-6060BA	HSN-6060BB	HSN-6060BC	HSN-6062CA	HSN-6062CB	HSN-6063CA	HSN-6063CB	HST-6003CA	HST-6003CB	HST-6003CC	HST-6006CC	HSN-6066BA	HST-6067BA	HSN-6068BA	
15-4218B01 Lt. Green	●	●	●	●	●	●																																		FRONT COVERS
15-4218B02 Haze Beige							●	●	●																															
15-4239B01 Lt. Green										●	●	●		●																										
15-4239B02 Haze Beige													●		●																									
15-4054C01 Green																				●	●	●																		
15-4054C02 Green																●	●	●	●						●														●	
15-4054C03 Gray																							●	●																
15-4054C04 Green																																								
15-4054C05 Gray																																	●	●	●	●				
15-4054C06 Haze Beige																										●	●	●									●			
15-4867C01 Gold*																													●	●										
15-4867C03 Chrome																															●	●								
15-4054C09 Haze Beige																																						●		
15-4217B01 Lt. Green	●	●	●	●	●	●						●		●																										BACK COVERS
15-4217B02 Haze Beige							●	●	●	●	●		●		●																									
15-4422A01 Lt. Green																●	●	●	●	●	●	●			●											●			●	
15-4422A02 Gray																							●	●																
15-4422A03 Haze Beige																										●	●	●	●	●	●	●	●	●	●		●	●		
36-4219B01 Lt. Green	●	●	●	●	●	●				●	●	●																												VOI CONT. KNOB
36-4219B02 Shadow Beige							●	●	●				●	●	●																									
36-4479A01 Dk. Green																●	●	●	●	●	●	●											●	●	●					
36-4346B01 Gray																							●	●	●													●		
36-4479A03 Shadow Beige																										●	●	●	●	●	●	●								●	
36-4095C01 Press Bar																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						●		
36-4378A01 Selector Bar																●	●	●	●				●	●	●								●	●	●	●		●		
36-4378A02 Selector Bar																										●	●	●	●	●	●	●					●	●	●	
18-4220B01 (250Ω)	●	●	●	●	●	●				●	●	●	●	●	●																									POT
18-4220B02 (10KΩ)							●	●	●																															
18-4465A01 (250Ω)																●	●	●	●	●	●	●																		
18-4139B01 (250Ω)																							●	●	●								●	●	●	●				
18-4465A02 (10KΩ)																											●	●	●	●	●	●					●			
1-4954A88	●		●	●												●	●			●	●												●	●						BED SHEET CLAMP
1-4958A61		●			●	●				●	●	●						●	●			●				●	●	●	●	●	●	●			●			●		
1-4959A08							●	●	●																															
1-4954B77																																							●	
40-4371A01	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●																									SWITCH
40-4371A02	●	●	●	●	●	●	●	●	●																															
40-4223B01	●	●	●	●	●	●	●																																	
40-4419C01 Pushbutton																																						●	●	
40-4258A01 SPDT																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
1-4003B01	●		●	●						●						●			●	●		●	●																	CABLE AND PLUG
1-4957A02		●			●						●						●	●			●			●	●											●				
30-4832C03 Haze Beige Molded						●	●	●	●					●	●											●	●	●	●	●	●	●	●	●	●					
30-4832C01 Haze Beige Molded							●																																	
30-4832C04 Haze Beige Molded																																					●	●		
1-4954B76																																							●	
50-4001D01	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	SPKR
42-4458D01 Spkr. Support																			●													●					●	●	●	MISC. PARTS
7-4176B01 Spkr. Support																●	●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●				
13-4391D01 Frt. Grille																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
3-4649A02 SCR, Cover Mtg.																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
47-4665A01 Pivot Pin Press Bar																●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
47-4666A01 Pivot Pin Selector Bar																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							●	

*Not available from stock.

Hospital Television Unique Parts



COLORVIEWER
color TV for hospitals



COMPANION
b&w TV for hospitals

Hospital Television VHF and UHF Tuner, Gear Box and Motor, Horizontal Osc. and Hold Coil, Horizontal Output and HV Transformer, Yoke, Vertical Output Transformer and Power Transformer Replacement Cross Reference Chart.

CROSS REFERENCE CHART

	MODEL NUMBERS															
PART NUMBER	MD1-1 ATS-442	D0101-B ATS-446	D0101-D QADTS-584	D0103-A DADTS-581	D0103-B DADTS-584	D0103-C/HDT1001AA DADTS-584 REVISED	HDT1002CA ZADTS-589Y	HDT1002CB QZADTS-589Y	HDT1003AA WADTS-589Y	HDT1003AB QWADTS-589Y	TV7701 PADTS-584	HDT1005AA D20TS-592	HDT1005AB & AC F20TS-612	HDT1006CA E20TS-592	HDT1006CB & CC E20TS-612	HDT1007CA (COLOR TV) UT567FN
1V65811A36 VHF TUNER ATT-145 (LESS GEAR BOX)	**															
77D66365A01 VHF TUNER RTT-307 (LESS GEAR BOX)		**														
77D66365A03 VHF TUNER RTT-324(LESS GEAR BOX)			**								●					
77D66365A04 VHF TUNER STT-324 (LESS GEAR BOX)				**	**											
77D66720A12 VHF TUNER MASPTT-334 (LESS GEAR BOX)						●										
77D66720A13 VHF TUNER PASPTT-334Y (LESS GEAR BOX)							**									
77D67557A13 VHF TUNER ASPTT-398Y (LESS GEAR BOX)								●								
77D66720A12 VHF TUNER MASPTT-334 (LESS GEAR BOX)									●			●	●	●	●	
77D67557A12 VHF TUNER ACPTT-398Y (LESS GEAR BOX)										●						
77V68630A62 VHF TUNER (OPTT420)																●
77D67941A09 VHF TUNER (AOPTT-411)												●	●			
77D67941A10 VHF TUNER (CAOPTT-411)														●	●	
77D67347A01 UHF TUNER TT-609*							**		**							
77D67691B04 UHF TUNER TT-622*										●						
77G10248A08 UHF TUNER (TT-635)*																●
77D67691A05 UHF TUNER (KTT-626)**												●	●	●	●	
59D65142A80 MOTOR AND GEAR BOX	●															
1D65989A11 MOTOR AND GEAR BOX				●	●	●				●						
1D65989A16 MOTOR AND GEAR BOX		●	●				●	●			●					
1D69162B07 MOTOR AND GEAR BOX																●
1D65989B20 MOTOR AND GEAR BOX												●	●	●	●	
24K754010 HORIZONTAL OSC. AND HOLD COIL	●															
24D65131A05 HORIZONTAL OSC. AND HOLD COIL		●	●		●	●					●					
1V66244A91 HORIZONTAL OSC. AND HOLD COIL				●												
24D65853B04 HORIZONTAL OSC. AND HOLD COIL							●	●	●	●						
24D65410A02 HORIZONTAL OSC. AND HOLD COIL	●															
24D65853A12 HORIZONTAL OSCILLATOR																●
24D68130A03 HORIZONTAL OSCILLATOR												●	●	●	●	
24D65147A65 HORIZ. OUTPUT AND HV TRANSF.		●	●		●	●	●		●		●					
24D66258A04 HORIZ. OUTPUT AND HV TRANSF.				●												
1V66511A40 HORIZ. OUTPUT AND HV TRANSF.			●		●	●					●					
24D66258A18 HORIZ. OUTPUT AND HV TRANSF.							●		●							
24D67602A01 HORIZ. OUTPUT AND HV TRANSF.								●		●						
24D67564A07 HORIZ. OUTPUT AND HV																●
24D65173A36 HORIZ. OUTPUT AND HV												●	●	●	●	
24D65616A02 YOKE 110° PLUG AND CABLE INCL.	●															
24D65616A09 YOKE 110° COMPLETE		●														
24D65616A10 YOKE 110° PLUG AND CABLE INCL.			●		●	●					●					
24D67461A03 YOKE 114°							●	●	●	●						
24D67822B09 YOKE 92° COMPLETE W/PLUG																●
24D68523A03 YOKE 114°												●	●	●	●	
25D65840A01 VERTICAL OUTPUT TRANSF.	●	●														
25D65840A19 VERTICAL OUTPUT TRANSF.			●		●	●	●	●	●	●	●					
25D65840A04 VERTICAL OUTPUT TRANS.				●												
25D66761A09 VERTICAL OUTPUT TRANSF.																●
25D65840B23 VERTICAL OUTPUT TRANSF.												●	●	●	●	
25D65663A09 POWER TRANSF.			●	●	●	●					●					
25D67448A01 POWER TRANSF.							●	●	●	●						
25D65830A02 PWR. TRANSF. (REMOTE & PWR. SUP. CHASSIS)												●				●
25D65172A33 PWR. TRANSF. (MAIN CHASSIS)																●
25D68164A02 POWER TRANSFORMER														●		
25D68164A07 POWER TRANSFORMER													●		●	
51D65171A73 MEMORY MODULE																●

NOTE: Due to obsolescence of some tuners and gear and motor assemblies reconditioned units will be supplied with a one year warranty.

*UHF tuners do not use gear and motor assemblies.

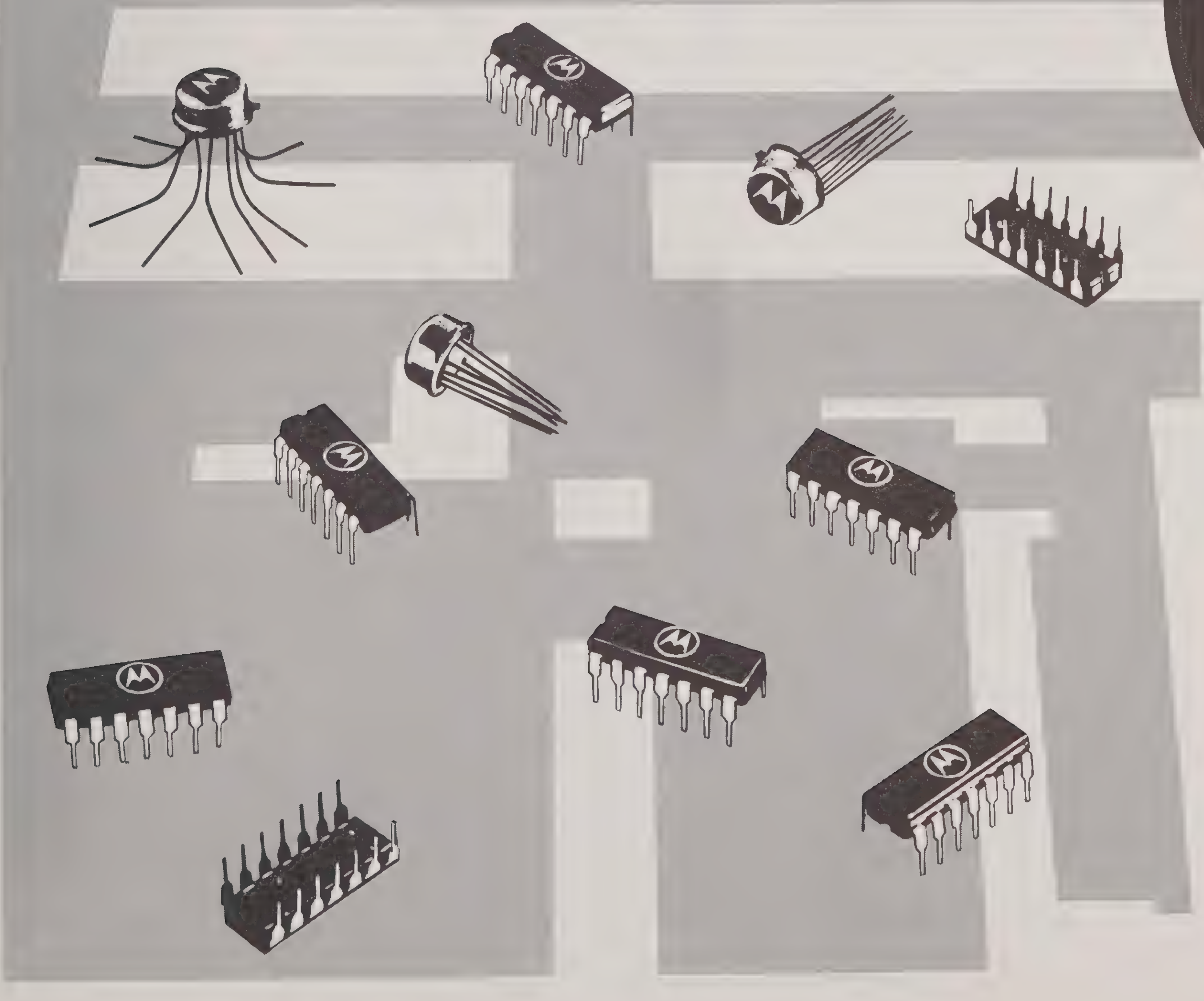
**Part is no longer available. Tuner will have to be reconditioned. Refer to memo for details Part no 68-84305A76.

Transistors, Diodes and Tubes

Evaluated and selected to provide greater performance and more dependable service in communications.

Having provided the major breakthroughs in the use of semi-conductors in radio communications equipment, Motorola knows the importance of having dependable replacements. You can depend on the solid-state devices listed here to provide dependable service because they have all been specially evaluated and selected by Motorola to meet particular needs. ■ In addition to providing a complete list of transistors, a cross reference chart is included to enable easy selection of the proper transistor.

Like transistors, when you buy your tubes from Motorola, you know you are buying the best . . . the same "circuit selected" components that are used in original equipment . . . carry the same high quality control selection and acceptance standards.



Advanced Motorola Engineering Enables You to Replace 90 Transistors With 6

THE ROG PROGRAM

Transistor replacement has been a growing problem, especially in light of the numbers of transistors used, as well as the large amount of communications equipment which requires servicing. Just as important as technical skill is quality and *availability* of replacement parts. Motorola has taken a giant step in reducing the problem of having enough of the right transistors on hand in service shops by the ROG replacement transistor program. Six transistors can now serve as direct replacements for 90 previous transistors.

WHAT IT MEANS TO YOU

The benefits to the service man are many: Primarily, ROG reduces his inventory and ordering problems. With only six transistors to order, and stock, inventories become smaller and more economical. You can service a greater amount of equipment, more effectively and more economically. With the easy availability of these parts, customer down time is reduced. Both order processing time and shipment money is saved as fewer orders are needed. Storage problems in vans are reduced; you can always take the materials to do the job right to the customer.

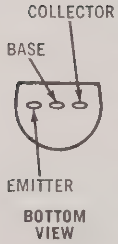
NEW MOTOROLA ROG TRANSISTORS REPLACE THESE MOTOROLA TRANSISTORS

48R 83750G01

NPN

REPLACES

TYPE	PART NUMBER
T1679	48-869037
T2515	48-869037
M9245	48-869245
M9299	48R869299
M9323	48R869323
M9325	48R869325
M9329	48R869329
M9338	48R869338
M9357	48R869357
M9377	48R869377
M9378	48K869378
M9389	48R869389
M9390	48R869390
M9418	48K869418
M9453	48R869453
M9532	48R869532
M9570	48R869570

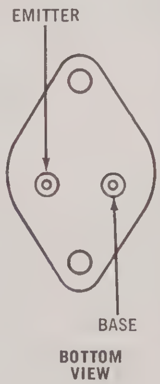


48R 83750G02

PNP

REPLACES

TYPE	PART NUMBER
2N176 (wht)	48K124285
XN12F	48-125219
MN22	48S125266
MN23	48A125267
MN46	48-125298
2N176	48-134447
2N376A	48S134571
2N176 (wht/brn)	48S134582
2N176 (wht/red)	48S134583
2N176 (wht/grn)	48S134584
2N176 (wht/grn/grn)	48S134620
M9083	48R869083
M9091	48R869091
M9104	48R869104
M9142	48R869142
M9255	48R869255
M9294	48R869294
M9342	48K869342
M9420	48R869420
M9458	48R869458
M9517	48R869517

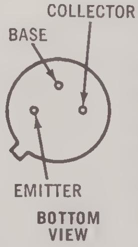


48R 83750G03

NPN

REPLACES

TYPE	PART NUMBER
M4630	48S134630
M9052	48R869052
2N2218	48R869061
M9125	48R869125
M9147	48R869147
M9174	48R869174
M9186	48R869186
M9187	48R869187
SM2716	48R869209
M9260	48K869260
M9271	48-869271
M9285	48K869285
M9355	48R869355
M9430	48R869430
M9491	48R869491
M9519	48R869519

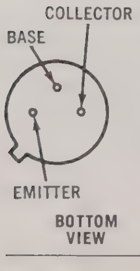


48R 83750G04

NPN

REPLACES

TYPE	PART NUMBER
M4590	48R134590
M4608	48-134608
M9002	48R869002
M9002 (red)	48R869016
M9059	48R869059
M9096	48-869096
M9144	48R869144
M9199	48R869199
M9366	48-869366

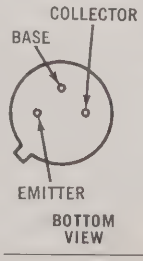


48-83750G05

PNP

REPLACES

TYPE	PART NUMBER
MN60	48-124317
2N652	48-124319
2N207	48-124322
2N655	48-124327
2N655 (grn)	48-134483
2N1193	48-134500
M4573	48-134573
M4597	48-134597
M4597 (grn)	48-134599
M4607	48-134607
2N207 (blu)	48-134633
M9105	48-869105
M9105 (blu)	48-869113
M4573 (blu)	48-869201
M9518	48-869518

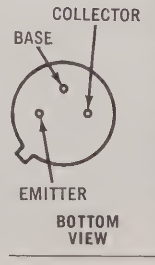


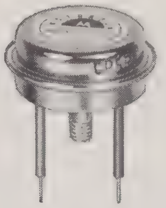
48-83750G06

PNP

REPLACES

TYPE	PART NUMBER
M9003	48-869003
M9009	48-869009
M9038	48-869038
M9003 (wht)	48-869040
M9003 (org)	48-869041
M9058	48-869058
M9003 (brn)	48-869071
M9080	48-869080
M9081	48-869081
M9098	48-869098
M9190	48-869190
M9003 (grn)	48-869192
M9258	48-869258





TRANSISTORS

As an added quality control feature for Motorola transistor customers, we have "color coded" units that have been specially graded for particular characteristics of certain circuits (color dot on top of transistor). JEDEC and/or TYPE numbers are provided for cross reference and identification only. To get the benefits of circuit selection, always use the Motorola part number when ordering replacement transistors. This pre-selection by Motorola is your guarantee of greater reliability and maximum performance. The use of other than Motorola recommended transistors may impair system performance.

MFG. TYPE	PART NO.	REPLACEMENT	MFG. TYPE
A1C	48-134900	....	......
A1D	48-134901	48-134995	......
A1E	48-134902	....	......
A1G	48-134904	....	......
A1H	48-134905	....	......
A1L	48-134918	....	......
A1M	48-134919	....	......
A1N	48-134920	....	......
A1S	48-134927	48-137002	......
A1T	48-134928	48-134929	......
A1U	48-134932	....	......
A1V	48-134933	....	......
A1W	48-134935	....	......
A1Y	48-134936	....	......
D1C	48-134917	....	......
D1D	48-134921	....	......
D1E	48-134939	....	......
D1K	48-134978	....	......
D1N	48-134976	....	......
P1C	48-134910	....	......
P1F	48-134934	....	......
P1G	48-134938	....	......
P1J	48-134943	....	......
P1R	48-134974	....	......
P1V	48-134987	....	......
P1W	48-134989	....	......
2NJ1C	48K124213	48K124299	R52
A2B	48-134942	....	......
A2D	48-134946	....	......
A2F	48-134948	....	......
A2G	48-134949	....	......
A2K	48-134953	....	......
A2T	48-134970	....	......
A2V	48-134979	....	......
A2Y	48-134981	48-134904	......
D2J	48-137074	....	......
D2M	48-137081	....	......
P1C	48-134910	....	......
P1J	48-134943	....	......
2NJ2 Green	48K124215	48K125285	2N217 White
2NJ2A &L	48R124226	....	......
2NJ2D	48K124232	48K125276	2N109M2
2NJ2E	48K124242	48C124255	2N140
2NJ2F	48K124252	48C124388	2N410
A3F	48-134992	....	......
A3H	48-134995	....	......
A3K	48-134997	48-137109	......
A3L	48-134998	48-63086A35	......
A3M	48-137002	....	......
2NJ3A	48K124203	48K125294	2N291
A4B	48-137015	....	......
A5A	48-137080	....	......
A5M	48-137107	....	......
A6M	48-137179	....	......
2NJ6	48C124205	48K125294	2N291
XN6B	48R124294	....	......
XN12A	48A125207	48K125267	MN23
XN12B	48A125208	48K125267	MN23
XN12C	48A125212	48K125267	MN23
XN12E	48K125218	48K125267	MN23
XN12F	48A125219	ROGO2	MN23
GL-13	48R869082	....	......
MN13B	48B125282	48-124313	......
MN13C	48K125263	No longer available (*)	
XN13D	48K125225	48-134511	2N270
ASZ2D	48-84018A01	....	......
25B	48-134805	....	......
MN21	48A125289	48A125288	2N375
MN22	48A125266	ROGO2	......
MN23	48A125267	ROGO2	......
24-K	48-134813	48-134807	......
2N25A	48-83042H52	....	......
MN29	48R134448	48-134747	2N176 red
SA29	48A134505	....	......
SA33	48R134492	....	......
SA33 Brown	48R134517	....	......
SA33 Red	48R134518	....	......
SP39	48R134489	....	......
2N43	48P82358D37	....	......
MN43	48A124335	....	......
MN44	48-124335	....	......
MN45	48A124334	....	......
MN46	48B125298	ROGO2	M4583
T1S-50	48-84018A09	....	......
MN52	48A124339	48A124313	2N651
R52	48-124299	48-134525	......
MN53	48A124318	48-134361	......
MN53 Blue	48A134631	....	......
54B	48R134809	48-134810	......
54C	48R134810	....	......
M54 grn	48R134667	....	......
M54 wht	48R134674	....	......
M54	48R869120	48K134675	M54
M54 Yellow	48K869139	....	......
M54 Orange	48K134665	48R869119	M54
2SB54	48-134407	....	......
2SB56	48-134408	48-134458	......
MN60	48A124317	ROGO 5	......
SM60	48K134531	48A134593	SM61 White
MN61	48K134438	....	......
SM61 White	48A134593	....	......
SM61 Red	48A134532	....	......
MN62	48A124331	....	......
SM63 Yellow	48R134534	....	......
MN63	48A124356	48A134523	MN64
MN64	48A134523	....	......
2SA72 White	48A134797	....	......
SM72-L	48-83110A01	....	......
2SA73	48R134514	....	......
MN73	48A124332	....	......
2N78	48P82358D38	....	......
R79	48A125202	48R869076	2N797
R-80	48-124210	48-869076	......
3N83	48P83827D02	....	......
M84	48A124340	....	......
M84A	48A134455	....	......
M84B	48-134551	....	......
MN94	48A124368	48A134548	M4548
MN98	48B865848	48-82525G09	......
R98-1	48K125253	PK-239	......
R98-6	48K125258	48K125254+6R5713	
2N109	48-124304	48-125276	......
2N109M2	48K125276	....	......
2N111	48K124236	48A124388	2N410
2N111M1	48K124277	48K124255	2N140
2N111M2	48K124278	48K124255	2N140
2N112	48C124234	48A124388	2N410
2N112M1	48K124279	48K124255	2N140
2N131	48K124238	48K125276	2N109M2
2N132	48C124233	48A124326	2N654
2N135	48A124286	....	......
2N138	48-124239	PK-239	......
2N140	48K124255	....	......
2N140M1	48K125278	PK-239	......
2N140M2	48K125280	PK-239	......
2N146	48-124218	....	......
2N155	48P83698E10	....	......
2N156	48P83698E11	No longer available	
2N158	48P83698E12	....	......
2N170	48R134582	48-83750 G02	ROGO2 ......
2N172	48C124216	....	......
2N173	48P83698E14	....	......
2N174	48P83699E10	....	......
2N176	48-134447	ROGO2	......
2N176 red	48R134747	....	......
2N176 White	48-124285	ROGO2	......
2N176 Green	48-134753	48-134747	......
2N176 White/Brown	48R134582	ROGO2	......
2N176 White/Green	48A134584	ROGO2	....
2N176 wht/rd	48R134583	ROGO2	....
2N176 White/Green/Green	48R134620	....	......

*CONTACT FACTORY FOR REPLACEMENTS. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION.

Transistors, Rectifiers and Diodes

Transistors (continued)

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
2N176 White/Red/Red	48R134619	....	......
2N176-1 wht	48R134634	....	......
2N178	48C124247	48A125267	MN23
2N185 Blue	48K124379	48K134419	ZN1274 Yel.
MN194	48R134572	48A124331	MN62
SA197	48-134610	....	......
2N207 Blue	48-134633	ROGO 5	2N1302
2N214	48A124362		......
ME216	48-84305A75	....	......
2N217	48B125270	48A124326	2N654
2N217 Red	48K125284	48A124326	2N654
2N217 Yellow	48K124375	48-125285	2N217 White
2N217 White	48K125285	....	......
2N218	48C125222	48A124388	2N410
2N220	48P83698E15	....	......
SA225	48-137078	....	......
2N231	48A124320	....	......
2N231 Blue	48R134617	....	......
2N231 Yellow	48-124381	(*)	......
2N231 Yel-Red	48-124382	48-124320	......
2N233A	48R869075	48-869076	......
2N238 Orange	48K124380	....	......
2N247	48A128219	48A134524	2N1638
2N247 Red	48A124399	48A134524	2N1638
2N247 White	48K134409	48K134547	M4545 White
2N251A	48P83042H52	....	......
2N269	48P83698E16	....	......
2N270	48A125271	48A134511	2N650
2N274	48A124321	48A134524	2N1638
2N274 Blue	48A134515	48A134546	M4545 Blue
2N274 White	48A134516	48A134547	M4545 White
2N277	48A125252	....	......
2N291	48B125294	....	......
2N312	48P83698E17	....	......
2N319	48-125296	....	......
2N335	48P83698E18	....	......
2N339	48P83698E19	No longer available	
MJE340	48-SP1083	48-SP1072	......
2N351A	48-CSP1002	....	......
2N366	48A124341	48-86851C19	......
2N373	48A124376	....	......
2N375	48A125288	....	......
2N376A	48R134571	ROGO2	......
2N383	48P83698E20	....	......
2N384	48A124363	....	......
2N384 Blue	48K124371	48A124363	M4363
2N384 Orange	48K124372	48K124363	M4363
2N384 White	48K134410	....	......
2N398A	48-869060	....	......
2N404	48A134525	....	......
2N406	48A124387	....	......
2N406 Gray	48K124389	....	......
2N406 Brown	48K124390	48-124387	......
2N406 Orange	48K124392	....	......
2N406 Blue	48K124394	....	......
2N407	48-124378	....	......
2N408	48A128094	48R134632	M4632
SM408	48-83110A01	....	......
2N410	48A124388	....	......
2N410 Green	48K869001	....	......
2N411	48P83698E21	....	......
2N414	48R134499	....	......
2N417	48P83698E22	....	......
2N441	48A124329	48K134430	2N441 Blue
2N441 Blue	48K134430	....	......
SP441	48R134575	....	......
2N442	48P83699E09	....	......
2N443	48R869251	....	......
S458A	48A134585	....	......
2N460	48-84300A79	....	......
2N470	48P83698E99	....	......

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
2N486	48R124312	....	......
2N491	48R869063	....	......
2N499	48A124324	48K869169	M9168
SR499	48-134671	....	......
2N500	48A124369	48R869168	M9168
2N502	48A124374	ROGO 2	......
2N502 red	48R134436	(*)	......
2N502 Brown	48K134435	48A134548	M4548
2N502 Green	48K134437	48A134548	M4548
2N504	48P83698E23	....	......
MP504	48P82255E32	....	......
MJE521	48-84092H01	....	......
2N525	48P83698E24	....	......
2N527	48R83131C35	....	......
2N532	48P83698E25	No longer available	
2N542	48R84302A82	....	......
2N553	48A134487	....	......
2N554	48A124330	....	M84
R563	48A134411	....	......
R564	48A134412	....	......
R565	48A134413	48-869146	M9146
SM565	48R869246	48-869146	......
2N573	48A134512	....	......
2N573 blue	48A134626	....	......
2N585	48K124342	....	......
2N594	48-84307A48	....	......
2N600	48R83698E26	....	......
2N627	48A134451	....	......
2N628	48R134574	48A124361	2N630
2N629	48A134452	....	......
2N630	48R124361	....	......
2N634A	48P83131C34	....	......
2N641	48A134434	48A134524	2N1638
2N650	48A134511	....	......
2N651	48A124313	....	......
2N651 (mtch pr)	48R89855A02	....	......
2N651 blk	48R89856A08	....	......
2N652	48A124319	ROGO 5	......
2N653	48A134400	....	......
2N654	48A124326	....	......
2N655	48A124327	ROGO 5	......
2N655 Green	48A134483	ROGO 5	......
2N655 Red	48K134482	....	......
2N669	48P866978	....	......
2N696	48P83698E27	....	......
2N697	48P83827D05	48P83698E28	
2N700	48P83698E29	....	......
2N705	48P83698E30	....	......
M4-706 White	48-134706	....	......
2N706	48-83192A46	....	......
2N706A	48P83698E31	....	......
2N706B	48P83698E32	....	......
2N709	48-83192A47	48-83192A50	......
2N711B	48P83698E33	....	......
2N741	48A134579	48K869169	M9169
2N741 Blue	48K869067	48K869169	M9169
GA749A	48P83131C36	....	......
GA750A	48P83131C37	....	......
SM752	48R869048	....	......
SM752	48-869049	48-869304	M9304
M784 org	48A134784	....	......
M791	48-134791	....	......
2N797	48R869076	....	......
M822	48-134823	....	......
M833	48-134833	....	......
ME216	48-84305A75	....	......
829B	48A134831	....	......
2N861	48P83698E34	....	......
SP891R	48A134645	No longer available	
SP891B	48A134646	....	......
SP891W	48A134647	48-134646	SP8913
2N910	48P83698E35	....	......
2N911	48R84302A13	....	......
2N930A	48-869675	....	......
BSY954	48-84018A04	....	......

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
2N956	48-83698E36	....	......
2N964	48-83192A49	....	......
2N1008B	48P83698E37	....	......
S1019	48-65144A72	....	......
2N1023	48A134507	48-83698E44	......
2N1038	48A134431	48R134585	M4548
2N1039	48-83698E38	....	......
SE-1044	48-65123A67	48-85144A72	......
SP1063	48-83698E62	....	......
SP1105C	48-84300A94	....	......
SP1108	48R134670	....	......
2N1111	48A124351	No longer available	
2N1143	48-83192A88	....	......
2N1156	48P83698E39	....	......
2N1163	48NSP1026	....	......
2N1166	48R84302A21	....	......
2N1167	48A134453	....	......
2N1183	48-83193A62	....	......
2N1185	48P83698E40	....	......
2N1186	48P83698E42	....	......
2N1188	48P83698E41	....	......
2N1191	48A134491	....	......
2N1192	48R134529	....	......
2N1193	48-134500	....	......
2N1194	48P83698E43	....	......
2N1224	48P83698E44	....	......
2N1225	48A134508	....	......
2N1225 yel	48R89912A01	48-134508	......
2N1225 blk	48R89912A02	48-134508	......
2N1274	48C134538	....	......
2N1274 org	48K134418	48-134419	2N1274 (Yel.)
2N1274 (Yel.)	48-134419	....	......
2N1302	48-83192A14	....	......
2N1304	48-83192A42	....	......
2N1305	48R869126	....	......
2N1306	48P83827D04	....	......
2N1308	48R84302A22	....	......
2N1312	48R134520	48-86851C23	......
2N1335	48P83698E45	No longer available	
2N1359	48R84302A23	....	......
2N1360	48P83698E46	....	......
2N1362	48P83698E47	....	......
2N1363	48P83698E48	....	......
2N1364	48P83698E49	....	......
2N1370	48R869250	....	......
2N1372	48-134468	....	......
2N1375	48P83698E50	....	......
SP1378	48-83699E47	....	......
2N1395	48P83698E51	48-134548	......
2N1396	48P83699E81	....	......
2N1414	48P83699E06	....	......
2N1415	48P83698E52	....	......
SP-1482-4	48A134696	....	......
T1482	48R869107	....	......
SP1483	48-134766	....	......
2N1486	48R84302A24	....	......
2N1526	48R134561	....	M9025
2N1527	48P83698E53	....	......
2N1530	48P83699E50	....	......
2N1532	48P83698E54	....	......
2N1533	48P83698E55	....	......
2N1534	48A04290A01	....	......
2N1537	48R869019	....	......
2N1540	48R134606	....	......
2N1541	48P83699E11	....	......
2N1542	48P83698E56	....	......
2N1544	48P83698E57	....	......
2N1545	48P83698E58	....	......
2N1546	48R869065	48-83193A75	......
2N1547	48P83698E59	....	......
2N1551A	48P83699E61	....	......
2N1552	48P83698E60	....	......
2N1553	48P83698E61	....	......
2N1554	48P83698E62	....	......
2N1555	48P83698E63	....	......
2N1556	48P83698E64	....	......

(*) CONTACT FACTORY FOR REPLACEMENTS. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION.

Transistors (continued)

MFG. TYPE	PART NO.	REPLACEMENT	MFG. TYPE
SP-1556-2	48A134759		
2N1557	48P83699E08		
2N1558	48P83698E65		
2N1562	48P83698E66		
2N1593	48A134442		
2N1605A	48R84302A25		
MP1612B	48P83827D06		
2N1623	48R869050		
2N1638	48A134524		
T-1656	48-124383	68-84066A47	
T1654	48A124383	48A134548	M4548
T1654 Blue	48K124386	48A134549	M4548 Blue
2N1655	48P83699E90		
2N1671	48R869206		
2N1671B	48-83192A15		
T1679	48R869037	48-83750G01	
2N1693	48-83698E93		
2N1701	48R869262		
2N1711	48R84302A26		
SE1714	48R134669		
2N1742	48P83698E67		
SP1742	48-134788		
2N1761 wht	48-134634		
2N1772	48P83698E60		
T1832	48A134521		
T1846	48P83131C48	48-83131C38	
2N1893A	48R84302A27		
2N1893	48P83699E01		
2N1906	48R134629		
2N1925	48P83699E21		
2N2043	48P83698E69		
2N2043A	48R84302A28	48-83698E69	
2N2094	48P83698E70		
2N2102	48R869184		
2N2140	48P83698E71		
2N2142	48P83699E04		
2N2143	48R869118	48-83699E04	
2N2144	48R869178		
2N2145	48P83699E03		
2N2147	48P83698E72		
2N2152	48P83698E73		
2N2153	48P83698E74		
2N2154	48-84254C79		
2N2156	48P83698E98		
2N2157	48P83699E05		
2N2158	48P83698E75		
2N2160	48R869264	48-869256	
2N2188	48P83698E76		
2N2189	48R84302A29		
2N2217	48P83698E97		
2N2218	48R869061	ROGO 3	
2N2219	48R869044		
2N2221	48R84302A30		
2N2222	48P83827D32		
2N2223	48R84302A32		
2N2270	48R869263	48-83193A63	
MCR2304-6	48-134881		
2N2369	48-84308A92		
2N2405	48-84303A33		
2N2495	48A134676		
T2515	48-869037	ROGO 1	
2N2575	48P83698E77		
2N2579	48-84300A80		
MCR2604-SL	48-83741C02		
2N2613	48-04628C01		
2N2646	48-82554F33		2N2646
2N2647	48R869385		
2N2654	48A134677		
2N2672	48A134655		
SM2700	48-134690		
SM2701	48-134691		
2N2708	48-83192A48		
2N2714	48R869230		
2N2716	48R869252		
SM2716	48R869209	ROGO 3	
SM2718	48R869145		
SM2719	48R869261		
SM2721	48R35259B01	48-84303A33	
SM2730	48R35259B02		
2N2789	48P83042H51		
SM2789	48-35259B03		
SM2797	48R869242		
2N2833	48-83698E78		
2N2834	48-84303A05		
2N2904	48P83698E79		
2N2905	48R84302A36		
2N2926	48P04805C08		
2N2947	48P83698E80		
2N2948	48P83698E81		
2N2951	48P83698E82		
2N2959	48-84307A20		
2N3055	48-82554F29	48-869302	
2N3133	48R869398		
2N3134	48R84302A40	No longer available	
2N3235	48R869399		
2N3249	48P83699E51		
2N3250	48-84307A22		
2N3251	48P83827D03		
2N3280	48R84302A44		
2N3283	48P83698E83		
2N3284	48R84302A45		
2N3286	48R84302A46		
2N3323	48-84307A09		
2N3393	48P83698E84		
2N3394	48R84302A47		
2N3402	48P04949C09		
2N3416	48R84302A48		
2N3440	48P83827D01		
2N3442	48R84302A49		
2N3478	48P83827D07		
2N3529	48C83741C01		
2N3546	48P83827D31		
3551	48A124395	48A134524	2N1638
3551A	48A134439	48A134548	M4545 White
3551A Blue	48K134502	48A134546	M4545 Blue
3551A Green	48K134503	48K134504	2N384 Green
3552	48A124396	48A124363	2N384
3553	48A124397	48A134506	2N1023
2N3565	48R83042H70		
2N3568	48R84302A51		
2N3569	48R84302A52		
2N3583	48-84254C94		
SJ3604	48-137027		
2N3612	48R869490		
2N3616	48P83699E80		
2N3618	48R869396		
2N3638	48P83699E64		
2N3643	48P83827D08		
2N3645	48-84307A21		
2N3646	48-84305A20		
2N3668	48-84242C01		
2N3694	48-134970		
2N3702	48R84018A08		
2N3703	48-84300A83		
2N3711	48-869570		
2N3712	48R84018A02		
2N3715	48-84307A42		
MM3724	48-869562		
2N3731	48-84306A27		
2N3740	48-83699E17		
2N3766	48P83699E30		
2N3771	48-84259C76		
2N3772	48R84302A56		
2N3773	48R84302A57		
2N3823	48-84307A19		
2N3866	48-84300A84		
2N3904	48R84066A57		
2N3905	48-84308A93		
2N3906	48R83358H10		
2N3960	48P83698E96		
2N3961	48R84302A62		
2N4036	48R84302A63	48-869469	
2N4050	48-82255E32		
2N4072	48-84306A25		
2N4093	48-84308A43		
2N4122	48P83042H69		
2N4123	48-84305A12		
2N4124	48-82541F31		
2N4125	48-84305A19		
2N4126	48-82541F30		
2N4224	48-84306A20		
2N4235	48-83042H57		
2N4240	48-84305A11		
2N4249	48-84305A08		
2N5456	48-84305A13		
2N5459	48-869607		
M4285	48-124285	ROGO 2	
M4313	48A124313		
M4320 Yel./ Blk.	48K869064		
2N4342	48-84305A18		
M4363	48A124363		
M4363 Red	48K869043		
M4363 Blue Dot	48R124371	48-124363	2N384
M4363 Green Dot	48R134504		
M4363 Wht.	48R134440	48-869548	
2N4399	48-84303A40		
2N4410	48-84306A62		
2N4416	48-84307A10		
M4442	48A134442		
M4450	48-134450	48-134631	
4456	48A134456		
M4459	48A134459		
4461	48-134461		
4465	48A134465		
4467	48-134467		
M4473	48A134473		
M4486	48R134486		
M4501	48-134501	48-134456	
M4509	48A134509	48-134456	
4510	48A134510		
M4521	48A134521		
M4521 Blue	48K134614		
M4521 Yellow	48R869193	48-869223	
M4525	48A134525		
M4545	48R134545		
M4545 Blue	48A134546		
M4545 White	48A134547	48-134546	
M4548	48A134548		
M4548 Blue	48A134549		
4562 vl	48A134562	No longer available	
4564	48A134564		
M4573	48A134573	ROGO 5	
M4573 Blue	48K869201	ROGO 5	
M4576	48A134576	(*)	
M4577	48R134577	(*)	
M4578	48R134578	(*)	
M4582 Brown	48R134582	ROGO 2	
M4583 Red	48R134583	ROGO 2	
M4584 Green	48R134584	ROGO 2	
M4586	48A134586		
M4589	48-134589	48-869204	
M4590	48A134590	48-83750 G04	ROG04
M4594	48A134594		
M4595	48R134595	48K869114	M9105 (Red)
M4595 Green	48K869103		
M4595 (mtch pr)	48R869020		
M4596	48R134596		
M4597	48R134597	ROGO 5	
M4597 Green	48R134599	ROGO 5	
M4605	48A134605	(*)	
M4605 blu	48K869018	PK-524	
M4605 Green	48-869042	PK456	
M4606	48R134606		
M4607	48R134607	ROGO 5	MN60
M4608	48A134608	48-83750 G04	ROG04

*CONTACT FACTORY FOR SUB. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION FOR REPLACEMENT.

Transistors, Rectifiers and Diodes

Transistors (continued)

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
M4619	48R134619	....	......
M4621	48R134621	48A134632	M4632
M4622	48A134622	....	......
M4627	48R134627	....	......
M4630	48R134630	ROGO 3	......
M4632	48R134632	....	......
M4640	48A134640	No longer available	
M4642	48A134642	....	......
4649	48-134652	....	......
M4706 wht	48A134706	....	......
M4709 rd/rd	48A134709	48-134821	M4821
M4714	48-134714	....	......
M4715	48-134715	....	......
M4733	48A134733	....	......
M4735	48-134735	....	......
M4736	48-134736	48-134790	......
M4739	48-134739	48-63085A71	......
M4765	48-134765	....	......
4768	48-134768	....	......
M4790	48-134790	....	......
4815	48-134815	48-134910	......
M4819	48A134819	48-65147A35	......
M4821	48A134821	....	......
4825	48-134825	....	......
4826	48-134826	....	......
M4828 grn	48A134828	....	......
M4837	48-134837	....	......
4838	48-134838	....	......
M4840	48A134480	48-134992	.....
M4841	48A134841	48-65147A72	......
M4842	48A134842	....	......
M4843	48A134843	....	......
M4844	48A134844	....	......
M4845	48A134845	48-134904	......
M4851	48-134851	....	......
M4852	48A134852	....	......
M4853	48A134853	....	......
4855	48-134855	....	......
4857	48-134857	....	......
M4872	48-134872	....	......
M4888	48-134888	....	......
2N4898	48-84305A09	....	......
2N4918	48R84302A70	....	......
2N4922	48-82554F31	....	......
2N5061	48-84755H01	....	......
2N5294	48-84305A10	....	......
2N5303	48R84302A71	....	......
2N5457	48-84305A13	....	......
2N5458	48-84303A67	....	......
SP-8918	48-134645	No Longer Available	
M9002	48R869002	ROGO 4	......
M9002 Blue	48K869096	....	......
M9002 Green	48K869054	....	......
M9002 Orange	48K869097	....	......
M9002 Red	48R869016	ROGO 4	......
M9002 Yellow	48K869039	48K869097	M9002 Orange
M9003	48R869003	ROGO 6	M9443
M9003 Brown	48K869071	ROGO 6	......
M9003 Green	48K869192	ROGO 6	......
M9003 Org.	48K869041	ROGO 6	......
M9003 White	48K869040	ROGO 6	M9152 Red
M9004	48R869004	48K869152	M9152 Red
M9004 Orange	48K869068	48K869152	M9152 Red
M9004 Green	48K869155	48-869152	......
M9004 Vio.	48R869055	48-869152	M9152 Red
M9004 Brown	48-869151	....	......
M9005	48R869005	....	......
M9005 Black	48K869069	48R869005	M9005

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
M9006	48R869006	....	......
M9007	48R869007	....	......
M9008	48R869008	....	......
M9009	48R869009	ROGO 6	......
M9010	48R869010	48K869189	M9010 (Red)
M9015	48R869015	....	M9023
M9017	48R869017	....	......
M9022	48R869022	(*)	......
M9023	48R869023	....	......
M9023 Red	48K869117	....	......
M9024	48R869024	48-869374	......
M9025	48R869025	....	......
M9026	48R869026	48K869057	M9057
M9027	48R869027	....	......
M9027 Violet/Orange	48R869073	48R869027	M9027
M9028	48R869028	....	......
M9029	48R869029	....	......
M9030	48R869030	48R869169	M9169
M9031	48R869031	48-869168	......
M9032	48R869032	PK-438	......
M9033	48R869033	....	......
M9034	48R869034	....	......
M9035	48R869035	48-83698E30	......
M9036	48R869036	....	......
M9038	48R869038	ROGO 6	......
M9044	48R869044	....	......
M9045	48R869045	48-869262	......
M9047	48R869047	48-869168	......
M9051	48R869051	....	......
M9052	48R869052	ROGO 3	......
M9053	48R869053	....	......
M9057	48R869057	....	......
M9058	48R869058	ROGO 6	......
M9059	48R869059	ROGO 4	......
M9062	48K869062	....	......
M9072	48R869072	....	......
M9074	48R869074	....	......
M9077	48R869077	....	......
M9078	48R869078	....	......
M9079	48R869079	PK-563	......
M9080	48R869080	ROGO 6	......
M9081	48R869081	ROGO 6	......
M9082	48R869082	....	......
M9083	48R869083	ROGO 2	......
M9084	48R869084	....	......
M9085	48R869085	(*)	......
M9085 Green	48-869220	(*)	......
M9085 Red	48K869122	(*)	......
M9085 Red/Blue	48K869127	(*)	......
M9086	48R869086	....	......
M9087	48R869087	....	......
M9088	48R869088	....	......
M9090	48R869090	....	......
M9091	48R869091	ROGO 2	......
M9092	48R869092	....	......
M9092 Blue		M9093	......
M9093	48R869093	....	......
M9094	48R869094	....	......
M9096	48R869096	....	......
M9098	48R869098	ROGO 6	......
M9099	48R869099	....	......
M9100	48R869100	....	......
M9101	48R869101	....	......
M9102	48K869102	....	......
M9104	48R869104	ROGO 2	......
M9105	48R869105	ROGO 5	......
M9105 Blue	48K869113	ROGO 5	......
M9105 White	48K869115	....	......

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
M9105 Yellow	48R869112	....	......
M9105 Grn.	48R869210	....	......
M9105 Red	48K869114	(Matched Pair)	
M9106	48K869106	....	......
M9107	48R869107	....	......
M9108	48K869108	....	......
M9109	48R869109	....	......
M9111	48R869111	....	......
M9116	48R869116	....	......
M9119	48R869119	....	......
M9120	48R869120	....	......
M9122	48K869122	68-84066A42	
M9123	48R869123	....	......
M9124	48R869124	....	......
M9125	48R869125	ROGO 3	......
M9127	48R869127	(*)	......
M9128	48R869128	....	......
M9129	48R869129	PK-235	......
M9130	48R869130	....	......
M9131	48R869131	48-869319	......
M9132	48R869132	....	......
M9133	48R869133	(*)	......
M9133 Grn.	48R869207	....	......
M9134	48R869134	....	......
M9135	48R869135	....	......
M9136	48-869136	No Longer Available	
M9138	48R869138	....	......
M9138 Red	48K869221	....	......
M9139	48R869139	....	......
M9140	48R869140	....	......
M9141	48R869141	....	......
M9142	48R869142	ROGO 2	......
M9143	48K869143	48-869466	......
M9143 Blue Dot	48K869191	....	......
M9144	48R869144	ROGO 4	......
M9145	48K869145	....	......
M9146	48R869146	....	......
M9147	48R869147	ROGO 3	......
M9148	48R869148	48-869025	......
M9149	48R869149	....	......
M9149 Wht.	48K869159	....	......
M9150	48K869150	48K869152	M9152
M9151	48K869151	48K869152	M9152
M9152	48R869152	....	......
M9153	48K869153	48R869152	M9152
M9154	48K869154	48R869152	M9152
M9155	48K869155	48R869152	M9152
M9156	48R869156	48R869152	M9152
M9157	48K869157	48R869152	M9152
M9158	48K869158	48R869152	M9152
M9160	48R869160	....	......
M9160 Red	48R869161	....	......
M9160 Green	48R869162	....	......
M9160 Blu.	48K869163	48-869160	......
M9164	48R869164	48-869494	......
M9165	48R869165	....	......
M9166	48R869166	....	......
M9167	48R869167	....	......
M9168	48R869168	....	......
M9169	48R869169	....	......
M9170	48R869170	....	......
M9171	48R869171	....	......
M9172	48R869172	....	......
M9173	48R869173	....	......
M9174	48R869174	ROGO 3	......
M9175	48R869175	....	......
M9176	48R869176	....	......
M9177	48R869177	....	......
M9179	48R869179	1-83699E38	......
M9180	48R869180	....	......

(*) CONTACT FACTORY FOR SUB. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION FOR REPLACEMENT.

Transistors (continued)

MFG. TYPE	PART NO.	REPLACEMENT	MFG. TYPE
M9181	48R869181	....	......
M9182	48R869182	(*)	......
M9183	48R869183	1-83699E39	......
M9185	48R869185	....	......
M9186	48R869186	ROGO 3	......
M9187	48R869187	ROGO 3	......
M9188	48R869188	....	......
M9190	48R869190	ROGO 6	......
M9191	48R869191	48-869466	......
M9194	48R869194	....	......
M9196	48R869196	48-869197	......
M9197	48R869197	....	......
M9198	48R869198	....	M9197
M9199	48R869199	ROGO 4	......
M9200	48K869200	....	M9168
M9202	48R869202	....	......
M9203	48R869203	....	......
M9204	48R869204	....	......
M9205	48R869205	....	......
M9208	48K869208	....	......
M9211	48K869211	68-84066A42	......
M9212	48R869212	....	......
M9213	48R869213	48-869477	......
M9214	48R869214	....	......
M9215	48R869215	....	......
M9216	48R869216	....	......
M9217	48R869217	....	......
M9218	48R869218	....	......
M9219 Red	48R869219	68-84066A42	......
M9220	48R869220	68-84066A42	......
M9222	48R869222	....	......
M9223	48R869223	....	......
M9224	48R869224	....	......
M9225	48R869225	....	......
M9226	48R869226	48-869648	......
M9227	48K869227	....	......
M9228	48K869228	....	......
M9229	48R869229	....	......
M9232	48K869232	PK-234	......
M9237	48R869237	....	......
M9238	48R869238	48-869169	......
M9239	48R869239	....	......
M9240	48R869240	....	......
M9241	48R869241	....	......
M9243	48K869243	48-869375	......
M9244	48R869244	....	......
M9245	48R869245	ROGO 1	......
M9247	48R869247	....	......
M9248	48R869248	....	......
M9249	48R869249	68-84306A46	......
M9251	48R869251	....	......
M9252	48R869252	....	......
M9253	48R869253	48K869282	M9253 (Wht.)
M9253 Wht.	48K869282	....	......
M9254	48R869254	48K869283	M9254 (Wht.)
M9254 Wht.	48K869283	....	......
M9255	48R869255	ROGO 2	......
M9257	48R869257	....	......
M9258	48R869258	ROGO 6	......
M9260	48R869260	ROGO 3	......
M9264	48R869264	48R869256	2N2646
M9265	48R869265	....	......
M9266	48R869266	....	......
M9267	48R869267	....	......
M9268	48R869268	....	......
M9269	48R869269	....	......
M9270	48R869270	....	......
M9271	48R869271	ROGO 3	......
M9273	48R869273	....	......
M9274	48R869274	....	......
M9275	48R869275	....	......
M9277	48R869277	....	......
M9278	48R869278	....	......
M9279	48R869279	....	......
M9280	48K869280	48-869404	......
M9281	48R869281	....	......
M9284	48K869284	....	......
M9285	48K869285	ROGO 3	......
M9286	48K869286	....	......
M9287	48K869287	....	......
M9288	48K869288	....	......
M9289	48K869289	....	......
M9290	48-869290	68-84066A42	......
M9291	48R869291	....	......
M9292	48R869292	....	......
M9293	48K869293	....	......
M9294	48R869294	ROGO 2	......
M9295	48K869295	....	......
M9296	48R869296	....	......
M9297	48K869297	....	......
M9298	48K869298	....	......
M9299	48R869299	ROGO 1	......
M9300	48R869300	....	......
M9301	48R869301	....	......
M9302	48R869302	....	......
M9303	48R869303	....	......
M9304	48R869304	....	......
M9305	48K869305	....	......
M9306	48R869306	....	......
M9307	48R869307	....	......
M9308	48R869308	....	......
M9309	48K869309	....	......
M9310	48K869310	68-84066A42	......
M9311	48R869311	....	......
M9312	48R869312	....	......
M9313	48K869313	....	......
M9315	48R869315	....	......
M9316	48R869316	....	......
M9318	48-869318	....	......
M9319	48R869319	....	......
M9320	48R869320	....	......
M9321	48R869321	....	......
M9322	48R869322	....	......
M9323	48R869323	ROGO 1	......
M9324	48R869324	48-869560	......
M9325	48R869325	ROGO 1	......
M9326	48R869326	....	......
M9327	48R869327	....	......
M9328	48R869328	....	......
M9329	48R869329	ROGO 1	......
M9330	48R869330	....	......
M9331	48R869331	....	......
M9332	48R869332	....	......
M9333	48K869333	....	......
M9334	48R869334	....	......
M9335	48R869335	....	......
M9336	48R869336	....	......
M9337	48R869337	....	......
M9338	48R869338	ROGO 1	......
M9339	48R869339	....	......
M9340	48R869340	....	......
M9341	48R869341	....	......
M9342	48R869342	ROGO 2	......
M9343	48R869343	....	......
M9344	48R869344	....	......
M9345	48R869345	PK-233	......
M9346	48R869346	....	......
M9347	48R869347	....	......
M9348	48R869348	....	......
M9349	48R869349	....	......
M9350	48R869350	....	......
M9351	48R869351	....	......
M9352	48R869352	....	......
M9353	48R869353	....	......
M9354	48R869354	....	......
M9355	48R869355	ROGO 3	......
M9356	48R869356	48-869456	......
M9357	48R869357	ROGO 1	......
M9358	48R869358	....	......
M9359	48R869359	....	......
M9360	48R869360	....	......
M9361	48K869361	....	......
M9362	48R869362	48-869404	......
M9364	48R869364	68-84066A50	......
M9365	48R869365	68-84066A50	......
M9366	48R869366	ROGO 4	......
M9370	48K869370	....	......
M9371	48K869371	....	......
M9372	48K869372	....	......
M9373	48K869373	....	......
M9374	48R869374	....	......
M9375	48R869375	....	......
M9376	48R869376	....	......
M9377	48R869377	ROGO 1	......
M9378	48K869378	ROGO 1	......
M9379	48R869379	....	......
M9380	48R869380	48-869138	......
M9381	48R869381	....	......
M9382	48R869382	....	......
M9383	48R869383	....	......
M9384	48R869384	....	......
M9387	48R869387	....	......
M9388	48K869388	48-869374	......
M9389	48R869389	ROGO 1	......
M9390	48R869390	ROGO 1	......
M9391	48R869391	48-869613	......
M9392	48R869392	....	......
M9393	48R869393	....	......
M9394	48R869394	....	......
M9395	48R869395	....	......
M9397	48R869397	....	......
M9400	48R869400	....	......
M9401	48R869401	....	......
M9403	48R869403	....	......
M9404	48R869404	....	......
M9405	48R869405	....	......
M9407	48R869407	48-869477	......
M9408	48R869408	....	......
M9409	48K869409	....	......
M9410	48R869410	48-869404	......
M9411	48R869411	....	......
M9412	48R869412	....	......
M9413	48R869413	....	......
M9414	48R869414	....	......
M9415	48R869415	....	......
M9416	48R869416	....	......
M9417	48R869417	....	......
M9418	48R869418	ROGO 1	......
M9419	48R869419	....	......
M9420	48R869420	ROGO 2	......
M9423	48R869423	....	......
M9424	48R869424	....	......
M9425	48R869425	....	......
M9426	48R869426	....	......
M9427	48R869427	....	......
M9428	48R869428	....	......
M9429	48R869429	....	......
M9430	48R869430	ROGO 3	......
M9431	48R869431	....	......
M9432	48R869432	....	......
M9433	48K869433	....	......
M9434	48R869434	....	......
M9435	48R869435	....	......
M9436	48R869436	....	......
M9437	48R869437	....	......
M9439	48R869439	....	......

*CONTACT FACTORY FOR SUB. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION FOR REPLACEMENT.

Transistors (continued)

MFG. TYPE	PART NO.	REPLACE-MENT	MFG. TYPE
M9440	48R869440	....	......
M9441	48R869441	....	......
M9442	48K869442	....	......
M9443	48R869443	....	......
M9444	48R869444	....	......
M9445	48R869445	....	......
M9446	48R869446	48-869466	......
M9447	48K869447	....	......
M9450	48R869450	....	......
M9451	48R869451	....	......
M9452	48R869452	....	......
M9453	48R869453	ROGO 1	......
M9454	48R869454	....	......
M9455	48R869455	....	......
M9456	48R869456	....	......
M9457	48R869457	48-869575	......
M9458	48R869458	ROGO 2	......
M9459	48R869459	....	......
M9460	48R869460	....	......
M9461	48R869461	....	......
M9462	48R869462	....	......
M9463	48R869463	....	......
M9464	48R869464	....	......
M9465	48R869465	....	......
M9466	48R869466	....	......
M9467	48R869467	....	......
M9468	48K869468	....	......
M9470	48R869470	....	......
M9471	48R869471	48-869571	......
M9472	48R869472	....	......
M9474	48-869474	....	......
M9475	48R869475	....	......
M9476	48R869476	....	......
M9477	48R869477	....	......
M9478	48R869478	....	......
M9479	48R869479	48-869423	......
M9480	48R869480	48-869639	......
M9481	48R869481	....	......
M9482	48R869482	....	......
M9483	48R869483	....	......
M9484	48R869484	....	......
M9485	48R869485	....	......
M9487	48R869487	48-83698E72	......
M9488	48R869488	48R869524	......
M9489	48R869489	....	......
M9491	48R869491	ROGO 3	......
M9492	48R869492	....	......
M9493	48R869493	....	......
M9494	48K869494	....	......
M9495	48K869495	....	......
M9496	48K869496	....	......
M9497	48-869497	....	......
M9498	48K869498	....	......
M9499	48K869499	....	......
M9500	48-869500	68-84307A27	......
M9501	48K869501	....	......
M9502	48K869502	....	......
M9503	48K869503	....	......
M9512	48R869512	....	......
M9513	48-869513	....	......
M9514	48R869514	48-869571	......
M9515	48K869515	....	......
M9516	48R869516	....	......
M9517	48R869517	ROGO 2	......
M9518	48F869518	ROGO 5	......
M9519	48R869519	ROGO 3	......
M9520	48R869520	....	......
M9521	48R869521	....	......
M9522	48R869522	....	......
M9523	48R869523	68-84303A32	......
M9524	48K869524	48-869661	......
M9525	48R869525	....	......
M9526	48R869526	....	......
M9527	48R869527	....	......
M9528	48R869528	....	......
M9529	48R869529	....	......
M9530	48R869530	....	......
M9531	48R869531	....	......
M9532	48R869532	ROGO 1	......
M9533	48R869533	....	......
M9534	48R869534	....	......
M9535	48R869535	....	......
M9536	48R869536	....	......
M9537	48K869537	48-869661	......
M9539	48-869539	....	......
M9540	48R869540	....	......
M9541	48R869541	48-869574	......
M9542	48K869542	....	......
M9543	48R869543	....	......
M9545	48R869545	....	......
M9546	48R869546	....	......
M9547	48R869547	....	......
M9548	48R869548	....	......
M9549	48R869549	....	......
M9550	48R869550	....	......
M9551	48K869551	....	......
M9552	48K869552	....	......
M9553	48K869553	....	......
M9557	48K869557	....	......
M9558	48R869558	....	......
M9560	48K869560	....	......
M9561	48R869561	....	......
M9562	48R869562	....	......
M9563	48R869563	....	......
M9564	48R869564	....	......
M9565	48R869565	....	......
M9567	48R869567	....	......
M9568	48-869568	....	......
M9569	48R869569	....	......
M9570	48R869570	ROGO 1	......
M9571	48R869571	....	......
M9572	48R869572	....	......
M9573	48R869573	....	......
M9574	48R869574	....	......
M9575	48R869575	....	......
M9576	48K869576	....	......
M9577	48K869577	....	......
M9578	48R869578	....	......
M9580	48-869580	....	......
M9582	48R869582	....	......
M9583	48-869583	....	......
M9584	48-869584	....	......
M9585	48-869585	....	......
M9586	48-869586	....	......
M9587	48-869587	....	......
M9588	48R869588	....	......
M9590	48R869590	....	......
M9592	48K869592	....	......
M9593	48-869593	PK-261	......
M9594	48R869594	....	......
M9595	48R869595	....	......
M9596	48R869596	48-84308A31	......
M9597	48R869597	....	......
M9598	48-869598	48-869476	......
M9599	48R869599	....	......
M9600	48R869600	....	......
M9601	48R869601	....	......
M9602	48R869602	....	......
M9603	48K869603	....	......
M9604	48K869604	....	......
M9605	48K869605	....	......
M9606	48R869606	....	......
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M9608	48R869608	....	......
M9609	48R869609	....	......
M9610	48K869610	....	......
M9611	48K869611	....	......
M9612	48K869612	....	......
M9613	48K869613	....	......
M9614	48R869614	....	......
M9616	48R869616	....	......
M9617	48R869617	....	......
M9618	48-869618	....	......
M9619	48-869619	....	......
M9621	48-869621	....	......
M9623	48-869623	....	......
M9624	48-869624	....	......
M9625	48-869625	....	......
M9626	48-869626	....	......
M9627	48-869627	....	......
M9628	48-869628	....	......
M9629	48-869629	....	......
M9630	48-869630	....	......
M9631	48-869631	....	......
M9632	48-869632	....	......
M9633	48-869633	....	......
M9635	48-869635	....	......
M9636	48-869636	....	......
M9639	48-869639	....	......
M9640	48-869640	....	......
M9641	48-869641	....	......
M9642	48-869642	....	......
M9643	48-869643	....	......
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M9648	48-869648	....	......
M9649	48-869649	....	......
M9650	48-869650	....	......
M9651	48-869651	....	......
M9652	48-869652	....	......
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M9654	48-869654	....	......
M9655	48-869655	....	......
M9656	48-869656	....	......
M9657	48-869657	....	......
M9658	48-869658	....	......
M9660	48-860660	....	......
M9661	48-869661	....	......
M9662	48-869662	....	......
M9663	48-869663	....	......
M9664	48-869664	....	......
M9665	48-869665	....	......
M9666	48-869666	....	......
M9667	48-869667	48-84092H01	......
M9668	48-869668	....	......
M9669	48-869669	....	......
M9670	48-869670	....	......
M9671	48-869671	....	......
M9672	48-869672	....	......
M9673	48-869673	....	......
M9674	48-869674	....	......
M9676	48-869676	....	......
M9677	48-869677	....	......
M9678	48-869678	....	......
M9679	48-869679	....	......
M9680	48-869680	....	......
M9681	48-869681	....	......
M9682	48-869682	....	......
M9683	48-869683	....	......
M9684	48-869684	....	......
M9685	48-869685	....	......
M9686	48-869686	....	......
M9687	48-869687	....	......
M9688	48-869688	....	......
M9689	48-869689	....	......
M9690	48-869690	....	......
M9691	48-869691	....	......
34516	48-4570C02	....	......
40250	48P04805C09	48-869225	......
40251	48R869259	....	......
T50818	48R134550	....	......
124331	48A124331	....	......
125286	48A125286	....	......
125299	48A125299	....	......

(*) CONTACT FACTORY FOR SUB. SUPPLY COMPLETE MODEL NUMBER AND CIRCUIT DESIGNATION FOR REPLACEMENT.

RECTIFIERS AND DIODES IN ORDER OF EIA (JEDEC) NUMBER

EIA NO.	MOTOROLA PART NO.
D1-54	48-83192A84
D2J	48-137074
CD6262	48-83192A51
Silicon A1466	48-83193A64
3N83	48-83827D02
1/4M14Z5	48-82256C13
1/4M6.5AZ5	48-82256C01
1/4M682	48-868907
1/4M68Z	48-82256C05
1/4M6.8Z5	48-82256C02
3/4M8.8Z3	USE 48-82256C56
3/4M24Z5	48-83624E80
3/4M180ZB5	48-82533D01
3/4M200ZB5	48-82533D13
1N23A	USE 1N23C
1N23B	USE 1N23C
1N23C	48K870405
1N23D	48K870406
1N23E	48K876428
1N34	48B822526
1N34A	48B82916D26
IN39	USE 48-134587
1N48	48B874355
1N54A	48P83624E42
1N63	48A82656B01
1N64	48-65837A02
1N72	USE 1N82A
1N78	48A85574A01
1N78A	48A85574A02
1N82A	48C82583B01
1N82AG	48R84302A01
1N91	48C848523
1N92	48K848555
1N93	48B841064
1N95	48C82178A07
1N96A	48R84302A02
1N98	48R84302A03
1N126A	48P83624E43
1N126	48C841741
1N127	48K871501
1N128	48A82656B02
1N133	48C82178A04
1N139	48R134587
1N147A	48K859464
1N147A (Red Dot)	48C82116E01
1N150	48K870407
1N158	48C833378
SM193	48-855671
1N198	48B872157
1N205	48P82358D32
1N208	48C873039
1N217	48-82385B05
1N253	48D82323B02
1N270	48P83624E44
1N273	48P82358D33
1N274	48R84302A05
1N276	48P83192A09
1N294A	48B811119
1N295	48C82178A02
1N295A	48P83624E45
1N363	48C875548
1N442	48K873877
1N443	48C873105
1N444	48K873239
1N457	48P82358D34
1N457A	48R84302A84
1N459	48P83624E46
1N461	48C82392B01
1N461A	48P83624E47
1N463	48K878429
1N468	48C873019
1N475	48P83699E12
1N475A	48P82358D36
1N482A	48B864199
1N483B	48C84302A06
1N486B	48C84302A07
1N536	48P83624E48

EIA NO.	MOTOROLA PART NO.
1N540	48P83624E49
1N541	48C86484A11
1N542	48C86484A01
1N547	48P83624E50
1N588	48C875241
1N602A	48C877224
1N645A	48-83358H07
1N647	48C875657
1N662	48P83192A10
1N678	48P83624E51
1N685	48C82420C06
1N687	48C82420C08
1N702	48P83827D10
1N710	48D82256C23
1N716	48P83193A60
1N746	USE 1N746A
1N746A	48P83624E52
1N750	48C82256C07
1N751	48C82256C15
1N751A	48-82256C15
1N752	48C82256C12
1N752A	48P83193A59
1N753A	48C84302A09
1N755A	48D82256C44
1N756A	48C82256C16
1N757	48D82256C18
1N757/Yel.	48-82256C18
1N758A	48C82256C11
1N811	48C82617C01
1N816	48B857185
1N821	48R84302A10
1N830	48-86219B02
1N830A	48P83624E53
1N903	48R84302A12
IN905A	USE 48-82420C05
1N914	USE SG5028
1N935	48P83624E54
1N936A	48R84302A14
1N941	48R84302A15
1N941A	48C82256C06
1N942	48R84302A16
1N943	48P83624E55
1N950	48-866724
1N956	48R84302A17
1N957	48P83624E56
1N957A	48D82256C19
IN957B	48-818459
1N958B	48P83624E01
1N959A	48C82256C09
1N959B	48P83624E57
1N960B	48D82256C38
1N961B	48P83624E02
1N962B	48D82256C34
1N963A	48D82256C17
1N963B	48D82256C25
1N964A	48D82256C50
1N964B	48D82256C50
1N965B	48C82256C14
1N966B	48-83698ED5
1N967	48D82256C24
1N967B	48P83624E58
1N968B	48P83624E04
1N969B	48P83624E05
1N970A	48D82256C49
1N970B	48D82256C31
1N971B	48D82256C20
1N972B	48P83624E06
1N975	48P83624E59
1N978B	48R84302A18
1N979B	48R84302A19
1N983B	48P83624E60
1N995	48R84302A20
1N1081	48C851644
1N1083	USE 1N1084
1N1084	48K851645
1N1089	USE 48-863751
1N1169	48C858361
1N1186	48-82554F32

EIA NO.	MOTOROLA PART NO.
1N1199	48C863751
1N1203	48C82478C03
1N1219	USE 48-82383B05
1N1221	USE 48-82466H17
1N1222	USE 48-82466H77
1N1223	USE48-82466H16
1N1224	USE 48-82383B06
1N1225	48K868944
1N1231	48P83624E61
1N1239	48P83624E62
1N1341	48P83624E63
1N1435	48P83827D09
1N1442	48C876313
1N1491	USE 48-82466A02
1N1563	48C867380
1N1696	48P83042H54
1N1763	48P83624E65
1N2069	48-66037A01
1N2070	48K868734
1N2090	48-66037A02
1N2091	48C82095C01
1N2094	48C82095C02
1N2482	48P83624E66
1N2484	48P83699E13
1N2610	48D87200A01
1N2611	48R87200A02
1N2612	48P04628C01
1N2613	USE 48-82466H02
1N2614	USE 48-82466H07
1N2615	48P83624E67
1N2622A	48P83624E68
1N2810A	48P83624E69
1N2811B	48P83131C57
1N2812B	48P83624E70
1N2816B	48C82321E03
1N2821	48C82321E05
1N2822BR	48-86850C30
1N2826BR	48-83131C40
1N2829B	48P83624E71
1N2831	48P83624E72
1N2833A	48C82321E02
1N2838A	48-82321E06
1N2970B	48P83624E07
1N2971B	48P83624E08
1N2972B	48P83624E09
1N2973B	48P83624E10
1N2974B	48P83624E11
1N2975B	48P83624E12
1N2976B	48P83624E13
1N2976RB	48R84302A38
1N2977B	48P83624E14
1N2979B	48P83624E15
1N2980B	48P83624E16
1N2982B	48P83624E17
1N2984B	48P83624E18
1N2984RA	48P83624E73
1N2985B	48P83624E19
1N2986B	48P83624E30
1N2987RB	48R84302A37
1N2988B	48P83624E21
1N2989AR	48-86850C63
1N2989B	48P83624E22
1N2991RA	48P83624E74
1N2992B	48P83624E75
1N2998B	48-84306A41
1N3003B	48P83624E76
1N3004B	48P83624E77
1N3005B	48P83624E78
1N3016B	48P83624E23
1N3017B	48P83624E24
1N3018B	48P83624E25
1N3019B	48-82533D10
1N3020A	48D82256C28
1N3020B	48P83624E79
1N3021B	48P83624E26
1N3022B	48D82533D04
1N3023B	48P83624E27

Transistors, Rectifiers and Diodes

EIA NO.	MOTOROLA PART NO.
1N3024B	48D82533D02
1N3025	48P83624E28
1N3026B	48D82533D09
1N3027B	48D82533D11
1N3028B	48P83624E29
1N3029M	48-82533D03
1N3029B	48P83624E80
1N3030B	48P83624E30
1N3031B	48P83624E31
1N3033B	48R84302A39
1N3034B	48P83624E81
1N3037	48-83358H62
1N3038	48D82533D07
1N3038A	48D82256C29
1N3039A	48P83624E82
1N3044A	48D82256C30
1N3045A	48D82256C27
1N3049B	48D82533D06
1N3062	USE 48-82420C18
1N3070	48D82420C15
1N3182	48-82190H09
1N3193	48P83624E83
1N3194	48P83624E84
1N3195	48P83624E85
1N3208	48P83624E86
1N3209	48P83624E87
1N3209B	48R84302A43
1N3210	48C82732C04
1N3212	48P83624E88
1N3282	48P83624E89
1N3283	48P83624E90
1N3287	48-84303A45
1N3324	48P83042H55
1N3340B	48P83698E92
1N3493	48P83624E91
1N3493R	48P83699E88
1N3493R/MR324R	48-83699E88
1N3495R/MR326R	48-82732C11
1N3660	48P04807C09
1N3660R	48P04807C10
1N3675B	48R84302A53
1N3680B	48P83624E92
1N3684B	48P83624E93
1N3685B	48P83624E94
1N3686B	48R84302A54
1N3688A	48R84302A55
1N3688B	48P83624E95
1N3719	48P83192A54
1N3789B	48P83624E96
1N3791B	48R84302A58
1N3793B	48R84302A59
1N3795B	48P83624E97
1N3795R	48P83624E98
1N3796	48-84307A12
1N3798B	48R84302A77
1N3800B	48A84302A60
1N3802B	48R84302A61
1N3823A	USE 48-82631D12
1N3826A	48D82533D08
1N3830	48P83698E01
1N3966A	48-83698E02
1N3994A	48C82137H05
1N3997A	48-83697E03
1N4001	48P83695E04
1N4002	48C82466H03
1N4003	48P83698E05
1N4004	48-82466H02
1N4005	48P83698E06
1N4009	48D82420C13
1N4108	48R84302A64
1N4151	48-84305A17
1N4154	48D82420C11
1N4161	48D82256C56
1N4305	48R430265
1N4370A	48P83698E07
1N4371A	48D82256C33
1N4372A	48R8430266
1N4448	48D82420C16
1N4719	48C82525G07
1N4719R	48-82525G12
1N4720	48P83698E08
1N4721	48R8430267
1N4724	48-84302H31
1N4728A	48D83461E03
1N4730A	48D82256C46
1N4731A	48D83461E13
1N4732A	48R8430268
1N4733A	48D82256C51
1N4735	48-84306A38
1N4736	48D82256C37
1N4739	48D82256C43
1N4740	48D82256C40
1N4742A	48D82256C54
1N4744A	48D82256C59
1N4745A	48D83461E01
1N4746A	48D82256C53
1N4747	48-137052
1N4747A	48D82256C39
1N4749A	48-84303A39
1N4750A	48D83461E12
1N4751	48-84254C99
1N4757	48P83042H53
1N4758	48-84306A26
1N4763	48D83461E16
1N4764	48D83461E06
1N4785	48-84306A28
1N4816	48-4807C11
1N4885	48B83445C01
1N4997	48P83151D76
1N4998	48P83698E09
1N5000	48-84307A16
1N5160	48C83976D01
1N5228A	48-86850C74
1N5233A	48-84307A40
1N5235A	48-84309A01
1N5237B	48-84309A02
1N5239	48D83461E15
1N5241	48-84307A13
1N5369B	48-84306A39
1N7101	48D82256C23
1.EG200	48-83024H01
1M25.0ZS10	48-82256C42
1M28.5Z510	48-82256C36
1.5M60ZB1	48-83698E91
2F4	48-84309A03
2T1	48C824739
205AP	48K868674
270-1	USE 48-82466H07
2700A	USE 48-847274
304A	48K863751
304F	48D82478C03
320A	USE 48-82466H12
320B	48-82466H15
320C	48D82383B05
320F	USE 48-82466H14
320H	USE 48-82466H15
320K	USE 48-82466H16
320M	48D82383B06
320P	48D82383B02
380P	USE 48-82466H18
4E20	48R85167B01
4E40	48R85167B02
4E20	48-85167B01
4EP30-8	USE PK-190
4E40	48-85167B02
4E50-28	USE PK-190
6A100	48R84302A04
9LR6-47	USE 48-751724
9LR6-54	48-65831A03
9LR4-73	USE 48-67120A02
9105	USE 48-191A07
10M10ZR10	USE 48-855512
10M3.9AZ5	48-82137H04
10M11Z10	48-868825 USE 48-83624E12
10M14Z5	48-864205
10M14ZR5	48-855512
10M16Z5	48-82137H01
10M24ZR5	48-83727B01
10M25ZR5	48-855513
10M27Z5	48-82137H02
10M47ZR	48-868504
10M59Z5	48-855677
10M150Z10	48-868907
10M200Z5	58-82137H03
50M12Z10	48-82321E04
1N2811B	48-83131C57
50M24Z	48-82321E01
AG0512	48C82478C01
AG3012	48C82478C03
ASZ23	48-82514F29
C-6F	48C04280C01
C47	48D82256C47
C-103	USE 48-82723C11
C106A2	48D83875D01
C106B2	48D83875D02
C106F2	48D83875D03
C10641	48-84307A74
CD1115	48R84302A85
CD1224	48-82392B02
CD1266	48P83827D11
CD6262	48P83192A51
CE1251	48C82617C02
CER-67	USE 48-82466H12
CER-68	48C82095C01
CER-70	48C82095C02
CER500	48-67926A01
CGD-1047	48K855216
CGD-1348	48C82139G01
CK705	USE 48-811119
CK705A	48A822289
CMC-H	48C82921604
CS41B	48D83280B01
C5FX1000	48A04890B01
D1-52	48P83192A85
D2J	48-137074
D-54	48P83192A84
D1820	48B82691B01
D5410	USE 48-868734
DR435	48C864459
DR1366	48B82127G01
ES-1102	48C847274
ES1608	48C863140
GV3A-700A	95A89648A01
HC-7004	48B86835A01
HCV	48C82095C03
HD1468	48C82178A06
HD1522	48C82178A04
HD2149	48C847274
HD2155	48K855216
HD2236	48C852462
HD5004	48D82420C14
HD6001	48K849022
HD6125	USE 48-82392B02
HD6164	48B857965
HD6637	USE 48-82420C15
HD6752	48NSP1048
JR0027A	48P04571C03
JR0055	48P04570C03
M-42X	48D83461E02
M4L3054	48-83976D01
M84A	48A134455
M84B	48S134551
M98	48K865848

EIA NO.	MOTOROLA PART NO.
M9621	48-869621
MA450E	1-89227A03
MA479	48-86219B01
MA480	48-86219B02
MA4285	1-89227A01
MA4287	1-89227A02
MA4341AA	1-89227A05
MA4471	01A89227A01
MA4498	48-86284B01
MC141	48C82363E03
MC2604SL-2	48C83741C03
MC-668P	51-4486D01
MC-832	51-4487D07
MC-833	51-4487D02
MC-1013P	51-86852C04
MC-1035P	51-86852C02
MCA2221P	48R84302A32
MCR-808-4	48NSP1039
MCR 1304-1	48C82605H01
MCR1305-5	48C83307B01
MCR1604	48C83741C02
MCR1605-1	48ASP1056
MCR26056-2	48-82605H02
MCR2835-4	48-84307A58
MDA920-1A	48C82106F01
MDA920-2	48P83043H57
MDA920-3	48P83043H58
MDA920-4	48P83043H59
MDA920-5	48P83043H60
MDA920-6	48P83043H61
MDA920-7	48P83043H62
MDA942-1	48P83043H63
MDA942-2	48P83043H64
MDA942-3	48P83043H65
MDA942-4	48P83043H66
MDA942-5	48P83043H67
MDA942-6	48P83043H68
MDA952-1	48P83043H69
MDA952-2	48P83043H70
MDA952-3	48P83043H71
MDA952-4	48P83043H72
MDA952-5	48P83043H73
MDA952-6	48P83043H74
MDA962-1	48P83043H75
MDA962-2	48P83043H76
MDA962-3	48P83043H77
MDA962-4	48P83043H78
MDA962-5	48P83043H79
MDA-990-1	48-84258C76
MDA-990-2	48-84258C77
MDA-990-3	48-84258C78
MDA-990-4	48-84258C79
MDA-990-5	48-84258C80
MI4A3	48B123067
MI4A4	48K128068
MM1700	48-83698E29
MP600	48C83185A01
MP3004	48-833969
MP16128	48-83827D06
MPA0279	48A88959B01
MPF-103	48-84305A13
MPF-104	48-869607
MPS-3393	48-35578B01
MPS-3711	48-869570
MR198B	48C82323B01
MR198C	48C86517A01
MR300	USE 48-82466H12
MR301	USE 48-82466H12
MR302	48D82383B05
MR303	USE 48-82466H14
MR304	USE 48-82466H15
MR305	USE 48-82466H16
MR306	48D82383B06
MR307	USE 48-82466H18
MR322R	48C82732C02
MR322	48C82732C03
MR323	48-82732C10
MR323R	48-82732C07
MR324R	48P83699E88

EIA NO.	MOTOROLA PART NO.
MR325	48C82732C05
MR325P	48C82732C06
MR831	48-84066A79
MR994A	48-84306A40
MR1030A	48C82525G07
MR1030B	48P83151D76
MR1032A	48C82525G04
MR1032B	48-82525G10
MR1033B	48C82525G06
MR1036A	48C82525G03
MR1121	48-82323B01
MV1644	48-82190H12
MV1864	48A35396B01
MZ2361	48-84274A01
MZ623-9B	48C82256C10
OA47	48-82541F25
OA91	48-84018A14
OMC-269	48C86442A01
OMC-299	48C86442A02
OMC620	48-833969
Q6-100	48P83192A52
RD1153	48B857965
RD1343	48C82392B03
RD3251	48C82617C02
RG 160A	48C82372F01
RS-1	48C86442A01
RS-6	48K868736
S4G	48C82617C01
S-6-G	48C82420C02
S491G (Blk. Dot)	48T82616B01
S491G	48B811119
S491-GMQ	48K868930
S2063G	48C82617C03
S2063G (blue dot)	48D82617C06
S2063G (purple dot)	48D82617C07
S2064D	48C82420C07
S2087G	48C82392B06
S3030G	48C82178A01
S3577-G	48C82178A09
S3681-G	48C82921G04
SA29	48A134505
SC-1482	15-83395E01
SC-2929AG	51-83395E02
SC-6705	51-84267A05
SC-6707	51-84267A07
SC-6727	51-84267A27
SCR311	48-83307B01
SCR321	48-82999G02
SCR166352	48-82999G01
SD2	48-4296C01
SDA165	48-83915C01
SDA10086	48-83392A01
SG22	48B857185
SG 419	48B857965
SG868	48C82420C01
SG3182	48-82392B03
SG3182 Rd	48-82392B05
SG3182 Wh	48-82392B10
SG3182 Grn	48-82392B09
SG3182 Red-Yel	48-82392B11
SG3183	48-82392B04
SG3198	48-82392B07
SG3400	USE 48-65145A74
SG5028	48C82420C05
SG5391	48D82617C04
SG5392	48C82392B08
SG5398	48D82617C05
SG5400	USE 48-82420C15
SG5482	48D82420C12
SJ3457	48C84302A50
SK111	USE 48-82466H12
SK112	48C83555A02
SK113	48C83555A03
SK114	48C83555A04
SK115	USE 48-82466H16
SK116	USE 48-82466H17
SK117	USE 48-82466H18
SK120	48C83555A09
SM193	USE 48-83110A01

EIA NO.	MOTOROLA PART NO.
SM 408	48C83110A01
SM2716	USE ROGO 3
SM2721	48-35259B01
SM2730	48-35259B02
SM2789	48-35259B03
SO6AA06AA	48C83665B01
SO6CA18FC	48C83665B02
SO6CA33FC	48C83665B03
SR76	USE 48-65145A74
SR116	48C82466H03
SR314	48C82732C01
SR330	USE SR1151
SR331	USE SR1151
SR332	USE SR1152
SR333	USE SR1153
SR333-2	USE SR1153
SR334	USE SR1154
SR335	USE SR1155
SR336	USE SR1156
SR337	USE SR1157
SR473	48B82982E01
SR499	48R134671
SR1034	48C82525G01
SR1034R	48C82525G05
SR1050	48C82525G02
SR1151	48C82466H12
SR1152	48C82466H13
SR1153	USE 48-82466H18
SR1154	48C82466H15
SR1155	48C82466H16
SR1156	48C82466H17
SR1157	48C82466H18
SR1158	48C82466H21
SR1160	48C82466H01
SR1161	48C82466H03
SR1162	48C82466H04
SR1164	48C82466H02
SR1165	48C82466H06
SR1166	USE 48-82466H18
SR1167	48C82466H08
SR1580	48C82525G09
STB569	48-83329G02
SV7	48K818459
SV-125	USE 48-82256C01
SV168	48C876474
SV-456	48C876474
SV-910	USE 48-855512
SV1374	USE 48-82256C56
SV2019	48C855512
SV2045	48K855513
SV-2052	48K855513
SV-2058	48C855512
SV9944	48D82256C32
SVR-54	48-82256C55
SW68	USE 48-869300
SZ-909	48C82256C08
SZ11805	48D83461E11
SZ1486	48D82256C21
T1-6	48C82363E02
T100	48C82095C01
T2G	48T876256
T400	48C82095C02
T50818	48-134550
TD100	48-84305A14
TD253	48P83193A61
T-255	48-82363E01
TIS37	48C84302A83
U-406	48D82403D01
UT3005	USE 48-82466H01
VC902	48C82190H0
VC903	48C82190H02
VC905	48C82190H03
VR-6A	48ASP1055
XD-3	48C83329G01
AZ36891	48-83213C01
125470	48P83471A91
53577G	48C65831A01

Rectifiers and Diodes

SELENIUM RECTIFIERS

Top-quality selenium rectifiers designed for high efficiency and cool operation. Ideal for replacement use and for original equipment. Supply plate, filament and bias voltages directly from power line or transformer. Stud mounting.

MAX. DC MA	MAX. RMS VOLTS	SIZE	PART NO.
50	160	1 x 1 x 1-1/32	48K 825383
50	160	1 x 1 x 21/32	48B 802669
75	130	1 x 1 x 13/16	48K 842141
100	20	1 x 1 x 7/16	48A 800116
100	40	1 x 1 x ½	48B 830268
100	130	1¼ x 1¼ x ¾	48D 842140
100	160	1¼ x 1¼ x 1¾	48K 800715
250	160	1⅝ x 1⅝ x 1⅜	48B 893492
300	18	1½ x 1½ x ⅜	48B 890348

General Purpose Diodes

General purpose diodes that can be used to replace top hat, surmetic, and other similar types within the PIV ratings. Replaces 1N4000 series, SR330 series, SR1150 series, etc.

For use over temperature range of—40°C to 150°C. All are rated at 1 AMP at 25°C and 750 MA at 100°C. All units have a maximum recovery time of 20 micro-seconds.

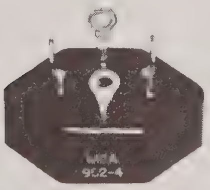
PIV	PART NUMBER
200 volts	48-82466H13
700 volts	48-82466H18

ZENER DIODES *(400 MW, 1, and 10 watt)*

NOM ZENER VOLTAGE	MFG. TYPE SUFFIX A = 10% TOL. SUFFIX B = 5% TOL. NO SUFFIX = 20% TOL.	MOTOROLA PART NUMBER
	(400 MW)	
6.8	1N957A	48C82256C19
7.5	1N958B	48P83624E01
8.2	1N959A	48C82256C09
9.1	1N960B	48C82256C38
10	1N961B	48P83624E02
11	1N962B	48C82256C34
12	1N963A	48C82256C25
13	1N964B	48C82256C50
15	1N965B	48C82256C14
16	1N966B	48P83624E03
18	1N967	48P82256C24
20	1N968B	48P83624E04
22	1N969B	48P83624E05
24.0	1N970A	48-82256C49
24	1N970B	48P82256C31
27	1N971B	48P82256C20
30	1N972B	48P83624E06
	(1 Watt)	
3.9	1N3823A	48-82533D12
5.1	1N4733A	48-82256C51
6.8	1N3016B	48P83624E23
7.5	1N3017B	48P83624E24
8.2	1N3018B	48P83624E25
8.8	—	48-82256C56
9.1	1N3019B	48D82533D05
9.4	—	48-82256C55
10	1N3020	48D82256C28
11	1N3021B	48P83624E26
12.0	1N4742A	48-82256C54
13	1N3023B	48P83624E27
15	1N3024B	48D82533D02
16	1N3025B	48P83624E28
18	1N3026B	48D82533D09
20	1N3027B	48D82533D11
22	1N3028B	48P83624E29
24	1N3029A	48D82533D03
27	1N3030B	48P83624E30
30	1N3031B	48P83624E31
39.0	—	48-82256C58
55.5	1N3038B	48-82533D07
159.0	1N3049B	48-82533D06
	(10 Watt)	
6.8	1N2970B	48P83624E07
7.5	1N2971B	48P83624E08
8.2	1N2972B	48P83624E09
9.1	1N2973B	48P83624E10
10	1N2974B	48P83624E11
11	1N2975B	48P83624E12
12	1N2976B	48P83624E13
13	1N2977B	48P83624E14
15	1N2979B	48P83624E15
16	1N2980B	48P83624E16
18	1N2982B	48P83624E17
20	1N2984B	48P83624E18
22	1N2785B	48P83624E19
24	1N2986B	48P83624E20
27	1N2988B	48P83624E21
30	1N2989B	48P83624E22

Molded Assembly Rectifier Bridges

These single phase full wave rectifier bridges are individual hermetically sealed rectifiers interconnected and encapsulated in molded assemblies. Maximum operating and storage temperature range —55°C to +150°C. 25 amp units are similar to MDA-962 series except that they incorporate an electrically insulated aluminum disc for improved heat dissipation when mounted directly to a chassis & heat sink.



10 AMP.

1.5 & 6 AMP.

1 AMP.

PEAK INV. VOLTS	1 AMP PART NO.	1.5 AMP PART NO.	6 AMP PART NO.	10 AMP PART NO.	25 AMP PART NO.
50V	48P83043H57 (MDA 920-2)	48P83043H63 (MDA 942-1)	48P83043H69 (MDA 952-1)	48P83043H75 (MDA 962-1)	48-84258C76 (MDA-990-1)
100V	48P83043H58 (MDA 920-3)	48P83043H64 (MDA 942-2)	48P83043H70 (MDA 952-2)	48P83043H76 (MDA 962-2)	48-84258C77 (MDA-990-2)
200V	48P83043H59 (MDA 920-4)	48P83043H65 (MDA 942-3)	48P83043H71 (MDA 952-3)	48P83043H77 (MDA 962-3)	48-84258C78 (MDA-990-3)
300V	48P83043H60 (MDA 920-5)	48P83043H66 (MDA 942-4)	48P83043H72 (MDA 952-4)	48P83043H78 (MDA 962-4)	48-84258C79 (MDA-990-4)
400V	48P83043H61 (MDA 920-6)	48P83043H67 (MDA 942-5)	48P83043H73 (MDA 952-5)	48P83043H79 (MDA-962-5)	48-84258C80 (MDA-990-5)
600V	48P83043H62 (MDA 920-7)	48P83043H68 (MDA 942-6)	48P83043H74 (MDA 952-6)		48-84258C81 (MDA-990-6)

SIGNAL AND POWER TRANSISTOR ASSORTMENTS

The PDK 481 Signal Transistor Assortment contains 8 popular signal transistors for Audio, Low Frequency Oscillator IF Amplifier and High Frequency Oscillator RF Amplifier servicing. Extra compartments are provided for the addition of other transistors.

The PDK 482 Power Transistor Assortment includes 3 power transistors with an ample supply of 4 types of mica insulators, spacers, shoulder washers, 2 types of transistor sockets, complete power transistor mounting kit and tube of silicon compound.

SOLID STATE BASE STATION KITS

PDK-4816 Transistor Kit—Contains the essential transistors to maintain both high and low band transmitter of the B and J 61, 71, 91, 53, 63, 73 and 93 LPB Base Station Series. This kit contains 7 transistors.

PDK-4817 Transistor Kit—Provides 13 transistors of 10 different types to maintain the high band receiver of standard squelch and "Private-Line" models of the B and J 53, 63, 73 and 93 LPH Base Station Series.

PDK-4818 Transistor Kit—Provides 18 transistors of 15 different types to service the low band receivers with "Extender" feature of the B and J 61, 71 and 91 LPB Base Station Series.

PDK-4819 Transistor Kit — Contains 18 transistors of 15 different types to maintain high and low band receiver and transmitter Power Supplies & Control Chassis for the B & J 61, 71, 91, 53, 63 and 93 LPH Base Station Series.

"MOTRAC" and "MOTRAN" RADIO

A kit such as the PDK 483 version contains 9 transistors which can be used to replace 25 different types used in "Motrac" series radio. Transistors are applicable to models with suffix letters "A", "B" and "C" models without "Extender" circuitry.

Some of the transistors that can be replaced with units from the PDK 483 include:

M4608
2N651
2N641
2N502BRN
MN46
MN52
2N247
2N176
2N652
2N502
3551A
M4590
M4589
M4548
M4363
2N1638
M4605
M9002
M4573
M4548BL
2N384
M4545WHT
M4313

The PDK 484 is designed for "Motrac" series radio receivers in models with "D" and "E" suffix and "C" suffix models in the 25-54 mc band with "Extender" circuitry. This kit also covers the "Motran" radio receiver.

BUSINESS "DISPATCHER" RADIO KITS

For replacement of transistors in Business "Dispatcher" radio, the two kits available contain the most often used and most essential units. Designed for high and low band D31, 33BMT series radios, the PDK 485 kit contains 8 transistors. The PDK 486 Kit contains 11 essential transistors and is designed for the D33CMT series.

PORTABLE EQUIPMENT ASSORTMENTS

VHF POCKET RECEIVERS — PDK 487 Transistor and Diode Kit (For Fig. A) covers both 25-54 and 150-174 MC models of HO1, and HO3 ANC with A, B, C, and AQ Suffix.

VHF PAGER AND "PAGEBOY" RECEIVERS — PDK 488 Transistor and Diode Kit (For Fig. B.) for the HO3BNC VHF Pager Kit. Contains the essential transistors and diodes to efficiently service this model. Contains 12 transistors and 2 diodes.

PDK 489 Transistor and Diode Kit (For Fig. C) contains the necessary transistors and diodes required in the maintenance of the high band N1070, N1071, N1080, and N1081 "Pageboy" receiver. Contains 11 transistors and 3 diodes.

PDK 4810 Transistor and Diode Kit (For Fig. C) is similar to the PDK 489 but for the low band N1072, N1073, N1082, N1083 "Pageboy" receivers. Contains 11 transistors and 3 diodes.

"HANDIE-TALKIE" RADIO — PDK 4811 Transistor Kit (For Fig. D) covers the H and P series "Handie-Talkie" radio transistorized receiver. Models included are H and P 21, 23, 31, 33 BAC series. Contains 10 transistors.

PDK 4812 Transistor Kit (For Figures E & F) is for the "HT" and "PT" series radiophone. Covers models H21, H23, DCN, 1000A, 3000A series. Contains 14 different transistors used in the receiver of these models. Can also be used to service the "PT" series, models P23, 33DDC 1000, 3000A series and the P23, 33DDC 1000B series.

PDK 4813 Transistor Kit (For Fig. F) is for the H23DCN, 1000B and 3000B series. Will also cover the new H23DEN 1000A and 3000A series. Contains 9 transistors to efficiently service the receiver on these models.

PDK 4814 Transistor Kit (For Fig. F). Contains the essential receiver transistors to maintain the H24DCN series of 450-470 MC portable equipment. Contains 10 transistors.

PDK 4815 Transistor Kit (For Fig. E) is designed to service the receiver of the "PT" series portable equipment as follows: P23, 33DDC, 3000B (Dual Squelch) series and the P23, 33DEN, 1000A and 3000A series. Contains 12 transistors.

Transistor and Diode Mounting Kits and Accessories

(A)

(B)

(C)

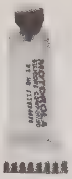
(D)

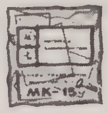
(E)

(F)

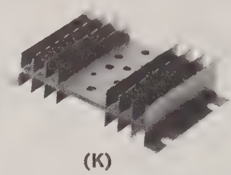
(G)

(H)


(I)



(J)


(K)

(L)

TRANSISTOR SOCKETS 2 PIN, MOLDED

Fig. A . . . **9-850066** Fig. B . **9-851303** Fig. C . . . **9-82287A01**
Fig. D . . . **9-82377H01** Fig. E . . . **9-82673A01**

TRANSISTOR INSULATORS (Fig. F)

Insulators for stud-type power transistors.
1″ diameter x .002 thick. Order **14-851751**
1¼″ diameter x .002 thick. Order **14-865820**

(Fig. G)

Insulators for standard power transistors with 1 3⁄16″ mounting centers.
3⁄32″ lead holes and 3⁄32″ mtg. holes x .002 thick. Order **14-82399B01**
¼″ lead holes and 5⁄32″ mtg. holes x .002 thick. Order **14-857437**
3⁄32″ lead holes and 5⁄32″ mtg. holes x .005 thick. Order **14-865875**
5⁄32″ lead holes and 3⁄32″ mtg. holes x .005 thick. Order **14-868505**

TRANSISTOR SHOULDER WASHERS (Fig. H)

Shoulder washers for insulating mounting bolts or studs for power transistors.
For #4 bolt to mount in 5⁄32″ chassis hole. Order **14-857512**
For #6 bolt to mount in 7⁄32″ chassis hole. Order **4-868830**
For #8 & 10 to mount in ¼″ chassis hole. Order **4-852296**

COMPOUNDS (Fig. I)

"Wakefield" insulating compound Order **11-83166A01** 2 oz. tube.

Silicone Compound

Recommended when installing power transistors, sealing antenna and R.F. connections, weatherproofing ignition systems or can be used as a lubricant for switches, cams, etc.

Order **11-834678** ¼ oz. tube. Order **11-490487** 8 oz. tube.

TRANSISTOR SOCKET KITS (Fig. J)

MK-10 Transistor Mtg. Kit—Includes power transistor socket, teflon insulating washer and 2 #6 sheet metal screws. Order **51-866809**

MK-15 Transistor Mtg. Kit—Same as MK-10 except mica insulating washer. Order **51-866810**

MK-20 Transistor Mtg. Kit—Same as MK-10 except anodized aluminum insulating washer. Order **51-866811**

HEAT SINKS (Fig. K)

MS10 universal heat sink for mounting diodes or TO3 diamond type power transistors. Supplied with an MK15 socket and mounting hardware. Order **51-866969**

MS15 Universal Heat Sink for mounting type TO36 (doorknob) power transistors. Supplied with mounting hardware. Order **51-866972**

HANDBOOKS (Fig. L)

Semiconductor Data Handbook

Provides specifications for Motorola's line of discreet semiconductors. Simplifies the selection of the most useful type numbers for a given application. Over 3300 pages. Order **68-866996**

Silicon Rectifier Handbook

Provides design applications and theory in the use of silicon rectifiers. 216 pages. Order **68-83150D79**

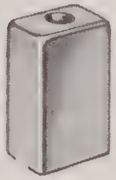
Power Transistor Handbook

Serves as a single source for both design and application information. 215 pages. Order **68-866733**

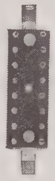
Zener Diode Handbook

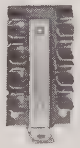
Provides detailed circuit design and application information. 184 pages. Order **68-866732**

Diode Mounting Boards and Cover


(A)

(B)


(C)


(D)

A. Aluminum cover for terminal boards.
15B 859076 Cover

B. Terminal Boards Permits plug-in mounting of 8 top-hat diodes.
1V 865695

C. Terminal Board has space for wiring 8 diodes.
1V 80717A77 Terminal Board

D. "Fuse clip" type for **1N1081** and **1N1084** type diodes.
Mounts 4 diodes.
1V 851648

Replacement Information

48-83445C01 transistor—replaced by a Motorola replacement kit. If the frequency range of your radio is 450-460 MHz, order PK-201. PK-202 should be ordered if your radio operates in the 460-470 MHz range. Ref. 68-84308A29

48-134436, 48-134633, 48-869345, 48-869364, 48-869365—To obtain the correct replacement for many of the above transistors, please supply your local Motorola parts office with the following information:

1) Model used on
2) Kit or module used in
3) Symbol number of transistor of kit or module used in
4) Manual part number
5) Schematic part number

Ref. 68-84066A45, 68-84066A44, 68-84066A40, 68-84066A50, or 61-84066A50

48-124381 transistor—the main usage is in the AC Voltmeter. If this is where you intend to use the part, we suggest you send in the instrument to your local parts office. Our Motorola repair facility will hand select a replacement for your particular instrument. Ref. 68-84066A47

48-134619 — 48-134620—When replacing the output transistors in the "Power Voice" and "Big Voice" speakers, it is important that the replacement transistor matches the remaining transistor. This is necessary to insure maximum power output and best performance. Both must be either 48-134619 or 48-134620. Ref. 68-84066A46

48-869129 transistor—replace with 48-869224. When making this change it is necessary to replace R53 with 6-129818. Ref. 68-84066A43

48-869249—two different replacements are available. If you are replacing the above transistor in the alert monitor receivers, order part number 48-869595 and refer to SRN-410A for circuit modifications. Order SRN410A from Products Services, 1301 East Algonquin Road, Schaumburg, IL 60172. For P43DEN HT Replacement—Complete instructions and parts required for the modification of the final audio amplifier circuits of the P43DEN radios are given in kit number PK-477, available from your Motorola Parts Dept. Ref. 68-84306A46

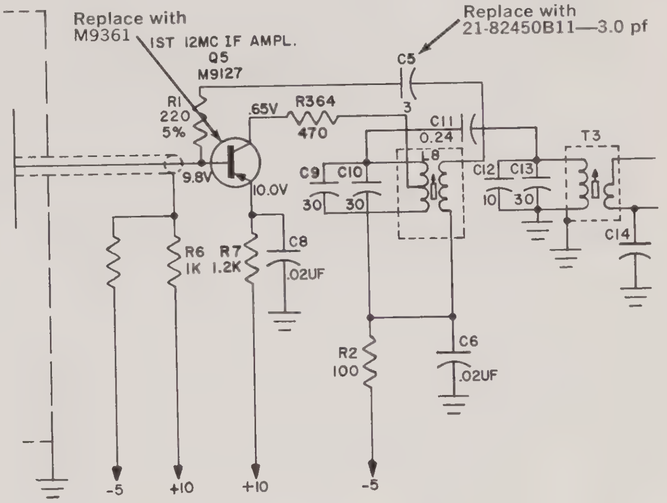
The following transistors do not have direct replacements for all applications. See list below for replacement in specific boards or kits.

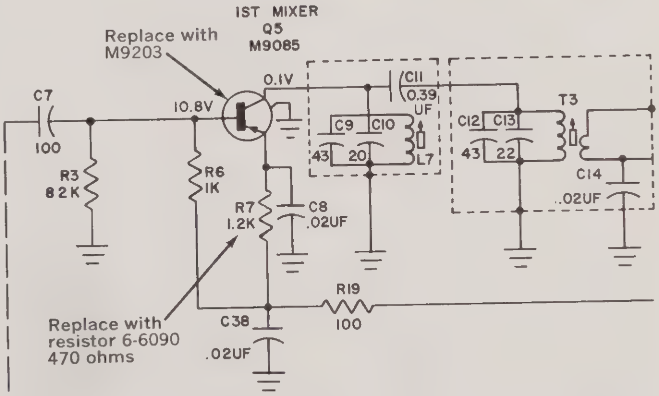
48-869085
48-869133
48-869220
48-134605
48-869211
48-869122
48-869310
48-869290
48-869219
48-869127

Select a replacement from the following list:

KIT	SCHEMATIC DESIGNATION	USE	REMARKS
TLN6544A, TLN6545A	Q6	48-869388	
TLN6544A, TLN6545A, TLN6220A	Q7-8-9	48-869387	
TLN6545A	Q26	48-869387	
TLN6347A, TLN6348A, TLN6532A	Q11	48-869376	
TLN6766A, TLN6849A, TLN8051A/AL, TLN8024A/AL	Q5	48-869374	
TLN6766A, TLN6849A, TLN6884A, TLN6721A, TLN6736A/AL, TLN8015A/AL, TLN8024A/AL, TLN8051A/L	Q7	48-869204	
TLN6721A, TLN6484A	Q5	48-869392	
TLN6736A/AL, TLN8015A/AL	Q5	48-869203	See Note 2
TLE6051A	Q5	48-869361	See Note 1
TLE6051A	Q7	48-869362	
TLB6101A, TLB6103A, TLB6104A, TLB6331A, TLB6332A, TLB6333A, TLB6334A	Q802	48-134548	
TLN6621B	Q5	48-869404	
TLN6622B	Q4	48-869403	
TLN6348A, TLN6347A, TLN6532A	Q15	48-869204	
TLN6480AS/AW, TLN6613AW	Q14	48-869204	
TLB6150A	Q701	48-134548	
TLD6361A, TLD6362A, TLD6372A, TLD6531A, TLD6532A, TLD6571A, TLD6572A	Q5	48-869204	
TLN6220A	Q6	48-869387	
NRB1100 Series		48-134548	

NOTE 1 When the M9361 transistor is used to replace the M9127 transistor in the 1st 12 MC IF amplifier of TLN6051A 450 "Motrac" Receivers, the capacitor C5 (21-82450B15—3.3 pf) and the ground clip (42-82876G01 must be removed and replaced with capacitor (21-82450B11—3. Opf) and ground clip (42-83898C01).





NOTE 2 When the M9203 transistor is used to replace the M9085 transistor in the 1st mixer of TLN6736 A/AL (High Band "Motrac" Receivers) and TLN8015 A/AL (Base Station) units the emitter resistor R7 (6-6393—1.2K ohms) must be removed and replaced with (6-6090—470 ohms). Ref. 68-84066A42

The SELENIUM RECTIFIERS 48-833354, 48-833355, 48-833356, and 48-833357 are no longer available

For use in mobile radio applications, these rectifiers can be replaced by 48-82466H18.

For use in microwave equipment, it is recommended that you use a conversion kit to replace the rectifier assembly. There are 4 kits that can be used. The power supply in the unit determines the kit needed. (See following list)

SK6323 Replacement Kit (1) required
P6003 (+250V), P8720, P8721, P8868, MU110 (+105V), MU207 (+105V), —400V), MU210 (+105V), MU211 (+105V, —244V)

SK6323 Replacement Kit (2) required
P6014, P6015, P6024, P6025, P8722, P8723, P8724, P8725, P8726, 8828 (+250V), P8835, P8867 (PA8866) (+300V), MU110 (+25V, —300V), MU206 (+250V, —300V), MU207 (+250V, —300V), MU208, MU210 (+250V, —300V), MU211 (+250V, —300V), MU246, MU247, MU248, MU249 (+250V)

SK6324 Replacement Kit (1) required
P6003 (—400V), P8828 (—400V), P8867 (PA8866) (—400V), MU110 (—400V), MU206 (—295V), MU207 (—400V), MU210 (—270V), MU211 (—400V), MU248 (—400V), MU249 (—400V)

SK6325 Replacement Kit (1) required
P8975, MU194, MU219, MU264

SK6326 Replacement Kit see note below
MU201 (+250V, —295V, —300V), MU202 (+105V, +250V), MU203 (—300V, —400V), MU265 (+250V, —295V), MU266 (+105V, +250V), MU278 (+250V, —300V, —400V)

NOTE: One SK6326 kit contains all the parts necessary to convert one each of the MU201, MU202, and MU203 power supplies used in the VP1N01/VP1N02 portable color TV relay system, or one each of the MU203, MU265, (or MU278), and MU266 power supplies used in the MV-10 rack-mounted color TV relay system.

Ref. 68-81121A17

MOTOROLA TUBES ARE THOROUGHLY TESTED

We look everywhere to find the best sources for each tube, then test them continuously and thoroughly to be sure the tube fits the application. Sometimes, our engineering staff tells us that the best we can buy is not good enough. Then we design one that is, evaluate it and make it into the most dependable component we can. Tubes that bear the Motorola name are truly champions. They are rated for reliability, stronger and will last longer. Motorola sells only tubes rated for "heavy duty industrial service" because anything with a lesser rating will not provide the dependable service you have come to expect from us. You know that the tubes you receive from us are dependable, because they are pre-aged and tested before we put our name on them. Tubes which don't meet our standards are returned to the supplier, *without the Motorola name on them.*

RECEIVING TUBES

Common tubes used with Motorola equipment and available from your Motorola Communications Div. Parts Dept.

TYPE
1B3GT
1G3GT/1B3GT
use 1B3GT
1R5
1U4
1V2
1X2B
2C39A
use 197-119A01
3A2
3AT2
3A3B/3B2
use 3A3B
3AW3
use 3A3B
3BZ6A
3V4
5AQ5
5AR4
5EA8
5U4GB
5V4GA
5Y3GT
5Y4GT
5Z3
6AB4
6AC7
6AF3A

TYPE
6AF4A
6AG5
6AG7
6AH6
6AK5
6AK6
6AL3
6AL5
6AM4
6AM8
6AN4
6AN8A
6AQ5A
6AQ6
6AQ7GT
6AS5
6AS6
6AS7GA
6AT6
6AU4GTA
6AU5GT
6AU6A
6AU8A
6AV6
6AW8A
6AX4GTB
6AX5GT
6BA6

TYPE
6BA7
6BC4
6BC5/6CE5
6BC8
6BE6
6BF7
6BG7
use 6BF7
6BH6
6BH8
6BJ6
6BJ8
6BL8/ECF80
6BM8/ECL82
6BN4
6BN6
6BN8
6BQ5
6BQ6GA
6BQ6GTB/6CU6
use 6BQ6GA
6BQ7A
6BR8A
6BS8A
6BU8
6BW4
6BX7GT
6BY6

TYPE
6BZ6
6C4
6CA4
6CB5A
6CB6A
6CF6
use 6CB6A
6CG7
use 6FQ7
6CG8A
6CH3
use 6CJ3
6CJ3
6CL3
use 6CJ3
6CL6
6CL8A
6CM6
6CM8
6CN7
6CS7
6CU6
use 6BQ6GA
6CW5
6CX8
6CY5
6DC6
6DE7

TYPE
6DJ8
6DK6
6DL4
6DQ6B
6DS4
6DT6
6DV4
6DW4A
use 6CJ3
6DX8/ECL84
6DZ4
6EA8
6EH7/EF183
6EJ7/EF184
6ES8
6EV5
6EW6
6FG6
6FQ7
6GH8A
6GK5
6GK6
6GW8
6H6
6HB7
6HQ5
6J4
6J6

TYPE
6JN6A
6KZ8
6L6
use 6L6GC
6L6GC
6LB6/6LF6
6LB6
6LE8
6LF6
use 6LB6/6LF6
6LY8
6SJ7
6SK7
6SL7GT
6SN7GTB
6T8
6T10
6TF4
6U8
6V6
6V6GT
6X4
6X4W
use 6X4
6X5GT
7AG7
7C5
7C7

TYPE
7F7
7V7 see below
12AB5
12AL5
12AT7
use 12AT78M
12AT78M
12AU6
12AU7A
12AV6
12AV7
12AX7
12AY7
12BA6
12BE6
12BH7A
12BL6
12BR7
12BW4
12BY7A
use 65-83735A02
12SN7GT
35W4
50C5
152A

REPLACEMENT OF 7V7

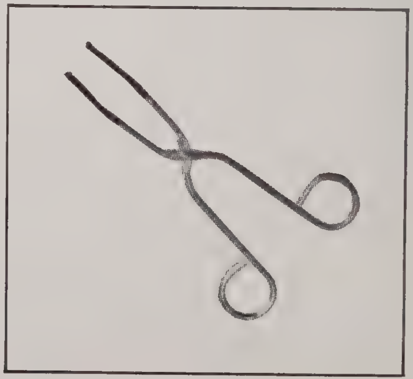
The 7V7 "Loktal" Tube is no longer available. An adapter (part number 1-83699E97) has been developed to permit use of a 12BY7A in its place. It should be noted that the (1-83699E97) adapter will work in every case where a 7V7 tube was used. However, the FCC type number of the transmitter must be changed if any one of the tubes is replaced with this adapter. Also the metering resistors must be changed. Contact Product Services, 1301 Algonquin Road, Schaumburg, Ill. 60172 for a copy of SRN-390C. Ref. 68-84307A88.

CONVENIENCE PACKAGING

10-pak, tubes

Motorola provides an extra bonus in the handy 10-Pak (unassorted) which simplifies ordering and controlling inventory. When tubes are ordered in increments of ten, they are automatically packaged in this manner.

TUBE PULLER 66-475051



SPECIAL PURPOSE TUBES

Common tubes used with Motorola equipment and available from your Motorola Communications Div. Parts Dept.

TYPE
OA2
OB2
OC2
OC3

OD3
1AD4
ML2C39WA
use 197-119A01

2D21
2E24
2E26
2E36

3B4
3B28
4/125A
use 6155U

4D21/4-125A
use 6155U
4CX250B
5R4GYB

TYPE
6AS6
6AS7GA
6BF7
6BG7
use 6BF7

100TH
254W
807

816
829B
866A
955

1635
2050
5651
5654

CK5672
CK5678
5686
5687

TYPE
5725
use 5725/6AS6W
5725/6AS6W
5726/8M
use 57268M

57268M
5751
5763

5814A
5829
5894
5963

5965
6080
6136
6146
use 8298

6155
use 6155U
6155U
6201

TYPE
6360
6397
6476
6520
see below

6550
6661
use 6BH6

6662
use 6BJ6
6669
6676
use 6676/6CB6A

6676/6CB6A
6678
use 6678/6U8A
6678/6U8A

6679
6680
6681
6883

TYPE
use 8032
6897
use 197-119A01
6907

6922
6939
7054
use 8077/7054

7055
7056
7058
7059

7060
7061
7119
7167

7258
7377
7551
7558

TYPE
7716
7735AM
Vidicon
7905

7984
8032
8042
8058

8072
8077/7054
8084
8102

8106
8119
8156
8298

8445
use 6EA8
8446
use 6CL8A

TYPE
8447
use 12BR7
8458
8489/6AN8
use 6AN8A

8552
8560A
use 65-83382D02

8643
use 97-136A01
65-83382D02

65-83735A02
97-136A01
97-136A02

197-119A01
Replaces
ML2C39WA
197-123A01
matched 5886

PICTURE TUBES

TYPE
9SP4
14WP4

TYPE
19AFP4
use 19FHP4
19AVP4
19EBP4

TYPE
19EYP22
19FHP4
19GWP22
use 19EYP22

TYPE
19XP4
use 19AVP4

21GCP4

TYPE
21JP22
21GWP22
use 22JP22

TYPE
27AFP4
use 68-84255C42

TYPE
ST4716A
use ST4716E

ST4716E

KLYSTRONS (Microwave)

TYPE
65-841282
65-841283

TYPE
65-878978
65-878979

TYPE
65-85299C02
65-85299C03

TYPE
65-85299C04
65-86160A01

TYPE
65-86176A01
65-86177A01

TYPE
65-86190C01
65-86190C02

TYPE
65-89003A01

6520 TUBE SUBSTITUTION

EQUIPMENT AFFECTED: Tube Type Microwave

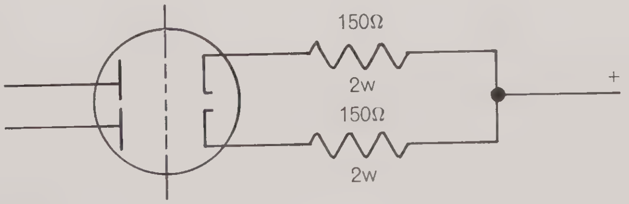
UNITS AFFECTED: Power Supplies

In Bulletin MFB803 (6/6/60) we recommended the use of the 6520 tube because of its better balanced sections. However, the supplier has discontinued its manufacture and it is therefore no longer available.

It is necessary then to return to using the 6AS7 or 6080 tubes for this application (series regulator or passing tube).

In order to minimize the original problem of imbalance with these tubes in heavily loaded supplies an alternative method can be applied. This consists of a 150 ohm resistor (2 watt) placed in the cathode circuit of each section. This will tend to equalize the current drawn from each section of parallel connected cathodes.

It will be necessary to reset the output voltage of the supply by means of the voltage adjust potentiometer.

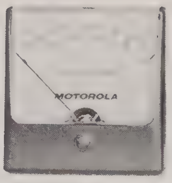


6AS7/6080

Ref. 68-84308A44

Panel Meters

1


2

3

4

5

PANEL METERS

High quality panel meters engineered to maintain very high accuracy through continued usage. Easy-to-read scales. Many with jeweled bearings and polished pivots. D'Arsonval and iron vane movements. See type below for dimensions.

DC Voltmeters

RANGE	FIG.	TYPE	PART NUMBER
0-20	1	A	72-82786E01
0-10/0-20	2	B	72-82354F01
0-1000	2	B	72-82352F02
0-3000	3	C	52-51429

VU and DB Meters

RANGE	FIG.	TYPE	PART NUMBER
−20+3DB	5	F	72-83270G01
−20+3DB	1	I	1-80723A07

DC Ammeters

RANGE	FIG.	TYPE	PART NUMBER
0-50 AMPS	2	B	72-83699E25

DC Microammeters

RANGE	FIG.	TYPE	PART NUMBER
0-50	4	D	52-880281
0-50	2	E	72-82993B01
0-50	5	F	72-83319G01
0-50	1	G	72-864363
25-0-25	2	B	72-82353F01
50-0-50	1	A	72-874867

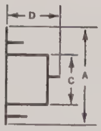
DC Milliammeters

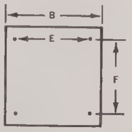
RANGE	FIG.	TYPE	PART NUMBER
0.100	3	C	52-80181
0.500	3	C	52-50691
0.600	2	E	72-82610H02

AC Voltmeter

RANGE	FIG.	TYPE	PART NUMBER
0-150	3	C	52-891586

METER DIMENSIONS

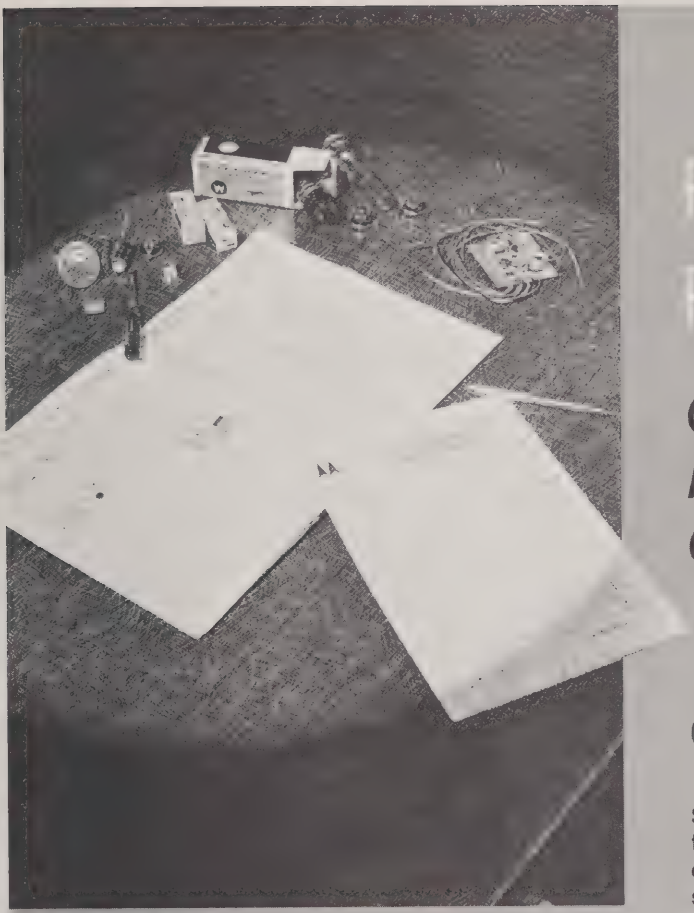




TYPE	HEIGHT A	WIDTH B	BODY DIA. C	DEPTH BEHIND PANEL D	MTG. CTRS. E	MTG. CTRS. F
A	2.369	2.369	2.00	8.32	1.5	—
B	2.73	3.15	2.19	1.75	1.88	1.88
C	3.13	3.00	2.75	2.06	2.25	2.25
D	4.20	4.65	2.75	1.66	4.00	3.54
E	3.25	3.25	2.73	1.76	2.24	2.24
F	SPECIAL DESIGN					
G	2.47	2.47	2.17	1.374	1.87	1.87
H	2.47	2.47	2.17	1.74	1.88	1.88
I	2.37	2.37	2.12	1.74	1.88	1.88

MODEL NO.	SCALE DIVISIONS	METER PART NUMBER	REPLACEMENT COVER
P-8501A	0-50 Micro Amps	52-880281	15-866965
S-1050A, S-1050C S-1051A, S-1051C	0-1V 0-3V −10 to +2 db	72-82322G01	15-863991
S-1051B, S-1051BR S-1053A, S-1053AR S-1053B, S-1053BR	0-1 Volts 0-3 Volts −10 to +2 db	72-82540E01	*
S-1052A, S-1052B	0-1 Volts DC & AC 0-3 Volts AC & DC 0-infinity ohms	72-82810D01	15-82884C01
S-1056A, S-1057A S-1058A, S-1C59A S-1062A, TU-546	Multi-Scale	72-82534D01	15-863991
S-1063A	Multi-Scale	72-82819D01	72-82884C01
S-1075A, S-1075B S-1075C		72-83192A68	*
S-1303A, S-1305A	0-20 Volts DC	72-82554F43	*
S-1303A, S-1305A	0-50 Amps DC	72-82554F44	*
S-1315A, S-1326A	Special Scale	72-82541F78	*
S-1318A, S-1319A S-1320A, S-1321A	Special Scale	72-84304A63	*
S-1323A, S-1325A	0-20, 0.6 KC	72-84308A94	*
S-1326A		72-84308A94	*
S-1327A (Series)	Freq. Error Meter	72-84204D48	
S-1327A (Series)	Deviation Meter	72-84204D49	
S-1079B	0-16 0-8KC	72-83107E01 (Edgewise)	
SLN-6213A	Replace-Low-Good	72-82756A02	15-866964
T-1001A	0-100 Watts	ST-998	*
T-1012A	0-50 Volts	68-84255C78	*
T-1012A	0-50 Amps	72-868677	*
T-1021A, T-1021B	Special Scale	72-82196D36	*
T-1034A	Special Scale	72-868398	15-83151D67
T-1039A	Special Scale	72-84255C11	*
T-1064A	0-10 Amps 0-100 Volts	72-83699E26 72-83699E23	* *
T-1100A	15-0-15 3-0-15 KC-Microamps 5-20KC −10 to +6 db	52-863460 72-863752	 15-866965
T-1101A	15-0-15 3-0-15 KC-Microamps 5-20KC −10 to +6 db	52-863460 72-863752	 15-866965
T-1255A	25-0-25 Microamps	72-82391E01	15-866914
T-1237AB	0-120 Watts	72-84864B04	*
T-1327BB	0-120 Watts	72-84864B04	*
T-1240AB	0-360 Watts 0.50 Microamp 0-250 Volts	72-84864B01 72-82609H03	* 61-82569D01
T-1240AB	0-600 Milliamperes 0-3000 Volts	72-82610H02 72-82610H03	 15-866966
T-1240BB	0-400 Watts 0-50 Watts 0-50 Microamps 0-250 Volts 0-600 Milliamps	72-84864B05 72-84864B01 72-84865B02	* * *
T-1400AB	0-150 Watts	72-84864B06 72-84864B01 72-84865B01	 *
TEK-5B	0-50 Microamps	72-82993B01	61-82569D01
TEK-5B	0-1000 Volts	72-82993B02	61-82569D01
TEK-5B	25-0-25 Microamps	72-82994B01	*
TEK-5B	0-10 VDC 0-20 VDC	72-82995B01	*
TEK-5C	0-50 UA DC	72-82352F01	15-84307A05
TEK-5C	0-1000 Volts	72-82352F02	15-84307A05
TEK-5C	25-0-25 Microamps	72-82353F01	15-84307A05
TEK-5C	0-10 VDC	72-82354F01	15-84307A05
TEK-7A	0-50 Microamps	72-864363	15-866914
TEK-13A	Replace-Low-Good	72-82756A02	15-866964
TEK-23	0-200 Milliamperes	72-82786E01	*
TEK-23	0-20 DC Volts	72-82785E01	*

*Not Available



Replacement Parts

Complete information
Purchasing economies
Ordering convenience

Quality protection that never ends

Since its pioneering days in radio communications, the laboratory has been the focal point in Motorola operations. Test . . . investigate . . . research . . . select . . . test again . . . evaluate. Being "better" is not enough—it has to be the best.

From a tiny lock washer to a highly complex circuit board, painstaking research continues until the final selection is made. This same extreme care is exercised in selection of Motorola components.

And Motorola replacement parts are carefully selected to match original components. It was best when new . . . best as a replacement too!

When communications are vital depend on genuine Motorola replacement parts.

Lamps

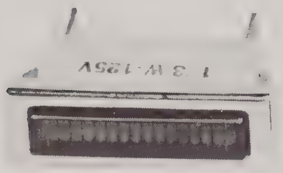


FIG. 1

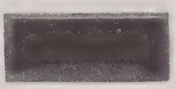


FIG. 2

LIGHT INDICATORS AND LENSES

Neon indicator light for use in Base Station equipment. Single rectangular hole snap in mount. (Fig. 1)

PART NO.	COLOR	VOLTAGE
65B82296H01	Red	110-125 Volts A.C.
65B82296H02	Amber	110-125 Volts A.C.
65-87802B21	White/Power On	125 Volts
65-87802B22	White	14 Volts
65B83136H01*	Red	14 Volts
65B83136H02*	Green	14 Volts
65-87802B01	Red	28 Volts
65-87802B02	Green	28 Volts
65-87802B04	Amber	28 Volts
65-87802B08	White/Meter	28 Volts

*Incandescent

Jewels for new Motorola solid state "Consolettes." Single rectangular hole mount. (Fig. 2)

PART NO.	COLOR
65B83241G01	Red
65B83241G02	Green

FIG. 3

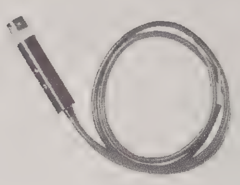


FIG. 4

Jewels for Business "Dispatcher" and General Two-Way Line use. Single hole mount. (Mounting speed nuts not included.) (Fig. 3)

PART NO.	COLOR
61A82720C01	Red
61A82720C02	Green
2C82360B03	Speed Nut for above

Light Indicators with 6″ Leads—Single Hole Mount (Fig. 4)

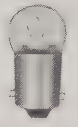
PART NO.	LENS COLOR	VOLTAGE
65-82840G01	Red	110-125 VAC
65-87881B01	Clear	28 Volts
65-87881B02	Red	28 Volts
65-87881B03	Green	28 Volts
65-87881B04	Amber	28 volts

NEON GLOW LAMPS

PART NO.	TYPE	VOLTS	WATTS	BASE
65K 898920	NE51	65	.04	S C BAY
65-818438	NE51H	110/125	.25	S C BAY
65K 817617	NE2	65	1/25	Unbased
65K 868606	NE2H	110-125	.25	Wire Term.

AC-DC PILOT LAMPS

PART NO.	TYPE	VOLTS	WATTS	BULB
65A 808464	S6 CAND	115	3.0	CLEAR
65X 80138	S6 CAND	115	6.0	CLEAR
65A 852594	C7 CAND	115	10	CLEAR



MINIATURE LAMPS

Supplied in lots of 10 unless otherwise noted

TYPE	VOLTS	AMPS	BULB & BASE	PART NUMBER
40	6-8	.15	TUB SCR	65X 14549
43	2.5	.5	TUB BAY	65K 810328
44	6-8	.25	TUB BAY	65K 10867
45	3.2	.35	TUB BAY	65K 831645
47	6-8	.15	TUB BAY	65K 11854
48	2.0	.06	TUB SCR	65K 35438
49	2.0	.06	TU BAY	65C 82010C06
51	6-8	.20	RND BAY	65K 4151
53	12-16	.10	RND BAY	65K 857026
55	6-8	.40	RND BAY	65K 12855
57X	12-16	.23	RND BAY	65K 535060
63K	6-8	.73	CAND SCR	65K 891831
81	6.8	1.02	RND BAY	65-127162‡
161	12	.19	"MICOR"	65-83554G01
313	28	.17	MIN. BAY	65C 82010C13
313G	28	.17	TUB BAY	65C 82010C05
313R	28	.17	TUB BAY	65C 82010C10
313Y	28	.17	TUB BAY	65C 82010C09
327	28	.04	MIDGET	65-83358H06‡
328	6	.20	MIDGET	65K 861827‡
330	14	.80	MIDGET	65K 861828‡
335	28	.04	TUB SCR	65-86556A01‡
338	2.7	.06	TUB CLIP	65-82671G01
344	10	.015	TUB CLIP	65-82671G02‡
356	28	.17	RND BAY	65C 82010C01

‡Individually packaged

TYPE	VOLTS	AMPS	BULB & BASE	PART NUMBER
388	28	.12	MIDGET	65-84991B01
455	6.5	.50	RND BAY (FLASHER)	65C 82010C07
756	14	.080	TUB BAY	65C 82010C03
757	28	.08	TUB BAY	65-82010C16‡
965	9.8	.5	SCR	65T 848568
1445	18	.15	RND BAY	65C 82010C02
1446	12	.20	MIN. SCR.	65K 852595
1465	14	.08	SPECIAL	65-83573E01‡
1490	3.2	.16	TUB BAY	65K 834423
1815	12-16	.20	TUB BAY	65K 84419
1819	28	.040	TUB BAY	65C 82010C04
1820	28	.1	TUB BAY	65C 82010C11
1829	28	.07	TUB BAY	65K 810161
1847	6-8	.15	TUB BAY	65-125595
1850	5	.09	TUB BAY	65C 82010C08
1855	6.3	180	RND BAY	65-854090
1866	6.3	.25	MIN. BAY	65C 82010C14
1892	12	.04	TUB BAY	65-538410
2310	14	.08	TUB PLUG	65-04132C01‡
2313	24	.05	TUB PLUG	65-04132C02‡
CM-8-193	28	.04	TUB SCR	65-04261C02‡
GE6	6.4	.10	RND BAY	65-82010C12‡
GE161	14	.19	TUB CLIP	65-83554G01
GE163	14	.065	TUB SCR	65-04261C01‡
NE76	120	.10	TUB PLUG	65-859383‡

Lamps and Sockets

JEWELS AND SOCKETS

Used on latest TCN6000 series control heads and "Motrac" radio control heads.

PART NUMBER	DESCRIPTION
61B 859620	JEWEL, RED (SNAP-IN TYPE)
61K 859621	JEWEL, GREEN (SNAP-IN TYPE)
9B 859619	SOCKET FOR ABOVE
61A 865158	JEWEL, RED (SCREW-IN TYPE)
61A 865159	JEWEL, GREEN (SCREW-IN TYPE) BOTH USED ON "MOTRAC" RADIO
9B 863168	SOCKET FOR ABOVE
61B 83678D01*	JEWEL, RED (SCREW IN TYPE)
61B 83678D02*	
61B83678D03	JEWEL, AMBER (SCREW IN TYPE)

*Used on dimmer light series control heads.

Short barrel socket for miniature bayonet base bulb, light socket assembly with mounting bracket. Spring clip formed to slide over bracket .048 thk X .500 wide.

PART NUMBER	DESCRIPTION
9-82778C01	Lamp socket

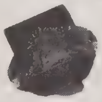
Lamp socket for miniature bayonet base bulb used in printed circuit applications. Two mounting holes .07 dia. spaced ⅜″ apart.

PART NUMBER	DESCRIPTION
9-82605F01	Lamp Socket

Miniature pilot lite socket for use on Mocom•35, uses bulb #335 miniature screw type.

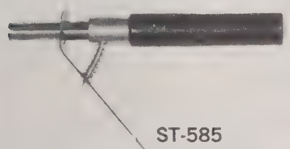
PART NUMBER	DESCRIPTION
9-84766A01	Lamp Socket

FOR "MICOR" RADIOS



PART NUMBER	DESCRIPTION
9-84627B01	Automotive lamp holder
65-83554G01	12 volt .19 amp lamp baseless type number 161

BULB PULLERS



ST-585

ST-691

PART NUMBER	DESCRIPTION
ST-585	Bulb puller (for type 327 & 388 bulbs)
ST-691	Bulb puller (miniature type bulbs)

PILOT LIGHT ASSEMBLIES

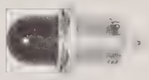
Vertical type half-inch open type pilot light for miniature bayonet base lamps. Mounts in 7/16″ hole.

PART NO.	JEWEL COLOR	JEWEL FINISH
60A 848400	RED	FROSTED
60K 848401	GREEN	FROSTED

Horizontal type half-inch for miniature bayonet base lamps. Mounts in 11/16″ hole. Depth back of panel is 1⅛″.

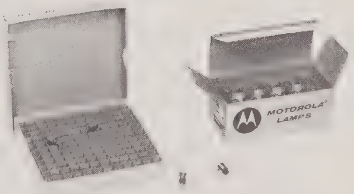
PART NO.	JEWEL COLOR	JEWEL FINISH
60B 17134	RED	CLEAR GLASS
60K 81193	GREEN	CLEAR GLASS
60K 84438	WHITE	CLEAR GLASS
60K 834434	AMBER	CLEAR GLASS
60K 834437	BLUE	CLEAR GLASS

Light socket and jewel assembly. Front mount w/hardware uses T-1¾ sub min. bulb #330 & 338 types. Replaceable from front of panel. Mounts in ⅜″ dia. hole. Depth back of panel is ¾″.



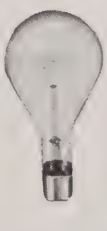
PART NUMBER	JEWEL COLOR
9B82684G01	Red
9B82684G02	Green
9B82684G03	Blue
9B82684G04	Amber
9B82684G07	Yellow
Water-Tight Unit	
9B84582A01	RED
9B84582A02	GREEN

CONSOLE REPLACEMENT BULB PACK



PART NUMBER	QTY.	TYPE	COLOR
PK-211	10	1829	RED
PK-212	10	1829	GREEN
PK-215	10	1829	WHITE
PK-216	10	1829	ORANGE
PK-217	10	1829	YELLOW
PK-218	50	CM327	CLEAR
PK-219	100	CM327	CLEAR

TOWER BULBS



Towers and other high obstructions that are not lighted due to a bulb burnout are hazards to aircraft navigation. Keep a supply of spare bulbs in your shop and vehicles and help prevent accidents.

6000 Hr. and 3000 Hr., 620 Watt Bulbs

These MoGul Pre-focus lamps are used in beacon lighting systems for obstructions to navigation such as TV, radio, microwave and transmission line towers, bridges, water tanks stack and other tall structures as specified by the CAA and FCC.

6000 Hr. 116 Watt Bulb

This is a 6000 hr., 120V, 116 watt screw base lamp used in obstruction lighting and meets CAA and FCC tower lighting requirements.

Tower Lamps

PART NUMBER	DESCRIPTION
65-866713	3000 hr., 620W-120V Mogul Pre-Focus
65-84258C75	6000 hr., 620W-130V Mogul Pre-Focus
65-84258C74	6000 hr., 116W-120V Screw Base

Fuses

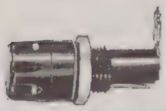


Fig. A

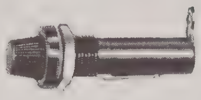


Fig. B

Fig. C

Fig. D

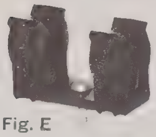


Fig. E

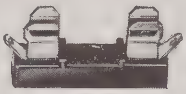


Fig. F

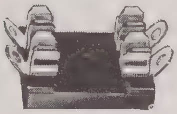


Fig. G

FUSE MOUNTINGS—EXTRACTOR POSTS

PART NO.	DESCRIPTION	FOR FUSES	FIG.
9C 82083C02	Miniature fuse Extractor post	3AG	A
9A 890375	Panel mount. Thumb knob	3AG—3AB	B
65A 81202	Panel mount, Thumb knob	4AG	B
1A 82779C01	Fuse holder complete consists of: 1 - 14A 82882A01 Body 1 - 14A 82883A02 Cap 2 - 42A 82884A01 Clip 1 - 41A 82885A01 Spring	3AG	C
9C 84277B01	In-line fuse retainer (for 1½″ fuses) **for Micor radios**		D
9C 84277B02	In-line fuse retainer (for 1⅛″ fuses) **for Micor radios**		D
42-84275B01	Mounting clip for **Micor** fuse retainers above		E
31A 824974	Single fuse mtg.	3AG-3AB	F
31K 836731	Double fuse mtg.	2—3AG	G

FUSE MINIATURE

Fig. A

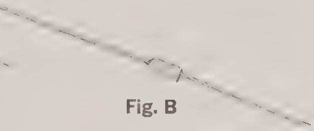
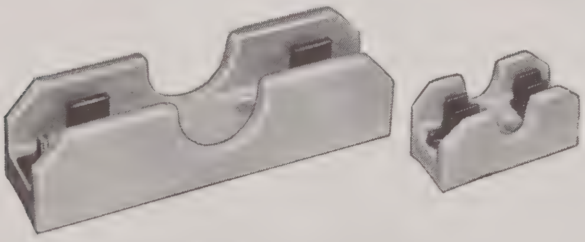


Fig. B

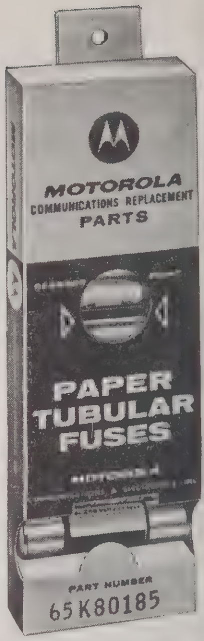
PART NO.	AMPS	VOLTS	FIG.
125V micro-circuit, used in HT radios.			
65C82896B01	100ma	125V	A
65C82896B03	1.0amp	125V	B
65C82896B04	2.0amp	125V	B
125V micro-circuit used in S-1327A service monitor			
65-84206D07	1/10 amp.	125V	A
(Replaces 65-84255C40 1/20th amp. fuse			



PORCELAIN FUSE BLOCKS

PART NO.	POLE	CAPACITY AMPERE
67B 892616	Single	1-30
67B 80179	Double	1-30
67B 834386	Triple	1-30
67B 83859	Single	31-60
67B 892551	Single	61-100

PAPER TUBULAR FUSES



PART NO.	AMPS
65K 810140	6
65K 80185	10
65A 50226	15
65K 52482	20
65K 834356	25
65K 50671	30
65X 84434	35
65K 83578 C01**	35
65K 830314	40
65C 84161B01***	40
65B 83578C02**	45
65A 83860	50
65A 891578*	60

*Not included in dispenser assortment.
Special Dual Element.

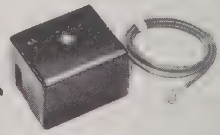
2″ x 9/16″ up to 30 amps.
3″ to ¾″ over 30 amps.
**2″ x 9/16″
***1.12 x .40 dia.,
Special for Micor radio

HOUSEHOLD FUSES

Plug fuse for use in fixed station Communication equipment over the temperature range of —30°C to +85°C.

CURRENT RATING	MOTOROLA PART NO.
3	65B 83099A01
6	65B 83099A05
8	65B 83099A02
15	65B 83099A03
20	65B 83099A04

FUSE BLOCK AND "A" RELAY ASSEMBLIES



Assembly contains relay and fuse block supplied with the "A" cable attached.

PART NO.	DESCRIPTION
1V 859440	6 or 12V, large fuse clips, horn relay.
1V 859445	12 volt, small fuse clips, horn relay.

COLLAR FUSE ADAPTER

Adapts 1-30 amp fuses to 30-60 amp fuse holder. Useful in 12 volt conversions.

Order **43-831204** (1 pair)

SPECIAL FUSES

	TYPE	AMPS	VOLTS	
65-136969	AGU 15	15	32V	Micor
65-84161B01	Special	40	32V	Micor
65-138164	AGU 60	60	32V	Motran
65-82896B01	Mini	100 ma	125V	HT
65-82896B03	Mini	1.0 Amp	125V	HT
65-82896B04	Mini	2.0 Amp	125V	HT
65-82291J01	Pigtail	1.0 Amp	250V	Handi Com
65-84206D07	Mini	1/10 Amp	125V	S-1327 Serv Mon
	Replaces 65-84255C40 1/20 Amp Fuse			
65-84699C01	KAA 15	15 Amp	130V	Comm. Consoles

3AG (MDL) TYPE SLO-BLO FUSES

PART NO.	AMPS	VOLTS
65K 879842	1/32	250
65B 841650	⅛	125
65K 817952	.15	125
65K 892098	3/16	125
65K 802992‡	¼	125
65K 817954	3/10	125
65K 834465‡	4/10	125
65K 475395*‡	½	125
65K 817953	6/10	125
65A 892099*‡	¾	125
65K 804910*‡	1	125
65K 834466‡	1¼	125
65K 804909	1.6	125
65K 804908*‡	2	125
65K 817955*	3	125
65K 834464	4	125
65K 817956*‡	5	125
65B 475247*‡	6¼	125
65K 475248	8	32
65X 834619*‡	10	32
65K 804906‡	15	32
65K 850521‡	20	32
65P 84307A56	25	32
65P 84307A57	30	32

3AG (AGC) TYPE QUICK TO MEDIUM ACTING FUSES

PART NO.	AMPS	VOLTS
65A 61668	1/16	250
65K 474899	⅛	250
65K 20987‡	¼	250
65K 868957	⅜	250
65X 21975‡	½	250
65A 865519	3/10	250
65K 898635	¾	250
65K 52281‡	1	250
65X 890033‡	1½	250
65K 42092*‡	2	250
65K 129421	2½	250
65K 20404‡	3	250
65K 61688	4	250
65R 52293	5	250
65A 51029*‡	5	32
65K 15270‡	6	250
65K 86099‡	7½	32
65A 10266*‡	10	32
65X 4165*‡	15	32
65K 4637*‡	20	32
65K 61682*‡	25	32
65K 20986*‡	30	32

4AG (AGS) TYPE QUICK TO MEDIUM ACTING FUSES

PART NO.	AMPS	VOLTS
65K 81441‡	5	32
65X 84433‡	15	32
65K 109030	20	32
65A 41492‡	30	32

8AG (AGX) TYPE FAST ACTING INSTRUMENT FUSES

PART NO.	AMPS	VOLTS
65-42869	1/200	
65R 61676	1/32	250
65R 61677	1/16	250
65R 61678	⅛	250
65K 34860	¼	250
65K 40217	½	250
65R 131165	¾	250
65R 61681	1	250
65R 61679	2	125
65-138180	5	125

WALL MOUNT FUSE ASSORTMENT

Motorola-recommended assortment contains 30 boxes of the fuses most commonly used in Motorola 2-way radio equipment. Sturdy plastic holder is designed for wall-mounting. Card at rear of transparent holder is imprinted with identification of fuse by amperage, voltage and Motorola part number. Holder actually has provisions for holding 60 boxes of fuses, giving the user the opportunity to supplement the Motorola-recommended assortment with other fuses indicated on the identification card.

‡Indicates fuses included in assortment.

PDK-652 Motorola-Recommended Assortment with Fuse Rack
ST-134 Plastic Fuse Rack Only

HANDIE-PAC FUSE ASSORTMENT

Ideal for use away from the shop . . . fits in the tool box or stores readily in the service vehicle. Fuses are easily identified through transparent plastic top. Standard assortment consists of 15 assorted boxes of the fuses commonly used in 2-way radio servicing. Assortment includes fuses set off by asterisks (*) in listing above.

PDK-651 Standard Fuse Assortment
ST-417 Plastic Fuse Box Only

1AG MEDIUM ACTING AUTOMOTIVE TYPE ¼″ DIA. BY ⅝″ LONG

PART NO.	AMPS	VOLTS
65R 122345	5	32
65A 82496G01	3	32
65A 82496G02	2	32
65A 82496G03	10	32

5 AG (AGU & KAA) FAST ACTING 13/32″ DIA. x 1½″ LONG

PART NO.	TYPE	AMPS	VOLTS	
65-136961	AGU 10	10	32	
65-136969	AGU 15	15	32	Micor
65-138794	AGU 25	25	32	
65-61683	AGU 40	40	32	
65-61684	AGU 50	50	32	
65-138164	AGU 60	60	32	Motran
65-84699C01	KAA 15	15	130	Comm. Console

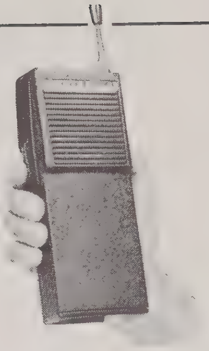
4AG (MDM) TYPE SLO-BLO FUSES

PART NO.	AMPS	VOLTS
65K 880865	1	250
65K 880866	2	250
65K 800751	3.2	32
65K 800752	4	32
65K 800753	5	32
65K 801233	6¼	32
65K 800754	8	32

Batteries

A

B



C

D

E

F

HT-220 SERIES & H23FFN (Fig. A)

PART NUMBER	DESCRIPTION
NLN6682A	Nickel-cadmium battery for standard duty HT-220 (15.6 Volts)
NLN6761A	Nickel-cadium battery for omni-housing extended duty HT-220 (15.6 Volts)
NLN6899A	Quick charge nickel-cadmium battery for standard duty HT-220 (15.8 Volts) (225 MAH)
60-84636H01	Quick charge nickel-cadmium battery for omni-housing extended duty HT-220 (15.8 Volts (450 MAH) Replaces NLN-6900A.
60-83582HO1	Mercury battery for standard duty omni-housing HT-220 (16.2 Volts)
60-84342H01	Mercury battery for extended duty omni-housing HT220 (16.2 Volts) Replaces NLN-6762A.

HT-100 SERIES & H13 FFN (Fig. B)

PART NUMBER	DESCRIPTION
NLN6781B	Nickel-cadmium battery and back cover for HT-100 radio (16.2 Volts)

HT200 SERIES, H21, R23 DCN & DEN (Fig. C)

PART NUMBER	DESCRIPTION
NLN6238A	Nickel-cadmium battery for HT-200 radio (14.4 Volts)
60-82668D01	Mercury battery for HT-200 radio (16.8 Volts) 303314
60-83624C01	Alkaline battery for HT-200 radio (18 Volts) 303620
60-83075E01	Mercury battery for hazardous duty HT-200 radio (10.4 Volts)
NLN6607A	Nican Battery for HT200 Hazardous Duty

PT-SERIES P21, 23DDC, P31, 33DDC & DEN (Fig. D)

PART NUMBER	DESCRIPTION
NLN6267A	Nickel-cadmium battery for PT-200 (14 Volts)
NLN6408A	Nickel-cadmium battery for NPN-6038A power supply for PT-400 (15 Volts)
NLN6310A	11 D-cell batteries for PT-200
NLN6406A	22 D-cell batteries for NPN-6036A power supply for PT400

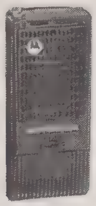
"Handie-Talkie" and Pack Set Units H21, 23, P31, 33 (Fig. E)

PART NUMBER	DESCRIPTION
For Completely Transistorized Receiver Models	
NLN6142A	Kit for NPN6021A (standard duty)
NLN6143A	Kit for NPN6022A (extra duty)
NLN6144A	Kit for NPN6023A (pack set)
For Partially Transistorized Receiver Models	
NLN6006A	Kit for NU125/NPN6000A (standard duty power supply)
NLN6007A	Kit for NU126/NPN6001A (extra duty power supply)
NLN6008A	Kit for NU144/NPN6002A (pack set power supply)

H21TTN "Handie Com" (Fig. F)

PART NUMBER	DESCRIPTION
NLN-8002A	12.5 volt nickle-cadmium battery (standard charge)
NLN-8096A	12.5 volt nickle-cadmium battery (rapid charge)
NLN-8095A	14 volt mercury battery
NLN-8105A	Alkaline battery pack (consists of 10-each, "AA" cells 60-82389J01) (for use with NLN-8106A battery holder)
NLN-8104A	Mercury battery pack (consists of 10-each, "AA" cells 60-82357J01) (for use with NLN-8106A battery holder)

A

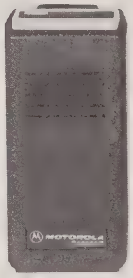


C

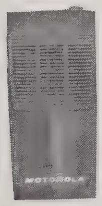
E

F

G



H



B

D

VHF PAGERS, H03 BNC (Fig. A)

PART NUMBER	DESCRIPTION
60-868967	Mercury battery for VHF tone and voice pager (4 volts)
60-83009H02	Nickel-cadmium battery for VHF tone and voice pager (3.75 Volts) (EIA 183)
60-83778H02	Nickel-cadmium battery for VHF tone only pager (2.5 volts) UL approved version
60-868968	pager 2.5 Volts) (E132) Mercury battery for VHF tone only
60-83778H03	Nickel-cadmium battery for VHF tone and voice pager (3.75 Volts) UL approved version
60-83009H01	Nickel-cadmium battery for VHF tone only pager (2.5 Volts) (EIA 183)

LOW-FREQUENCY PAGERS H1041 TO 52 (Fig. B)

PART NUMBER	DESCRIPTION
60-82168J01	1.5 volt mercury battery. Replaces 60-82936C01 (E401)
60-855262	1.4 volt carbon zinc battery (NE)
NEN6034A	Contains 20, 1.5 volt mercury batteries

H01, 3ANC (Fig. C)

PART NUMBER	DESCRIPTION
NLN6010A	Mercury battery kit contains one 2½ volt and two 4-volt batteries
NLN6012B	9.6 volt nickel-cadmium batteries
NK149	Consists of ten 4 volt mercury batteries
NLN6018A	Consists of ten 2.5 volt mercury batteries

H21, 23 NAC (Fig. D)

PART NUMBER	DESCRIPTION
NLN6020A	Contains five 30 volt and one 1.5 volt batteries

LOW-FREQUENCY PAGERS NRA1030A SERIES (Fig. E)

PART NUMBER	DESCRIPTION
60-868967	4 volt mercury battery for early version of low frequency pager
NK149	Contains ten 4 volt mercury batteries
60-82179B01	4 volt nickel-cadmium batteries for early versions of low frequency pager
60-82179B01	Replacement battery for NLN-6099A conversion kit. (To convert NRA series to nickel-cadmium battery operation, order 38-82302B01 battery retainer button and 14-82861B01)
60-868967	Replacement battery for NLN-6100A conversion kit. (To convert NRA series to mercury battery operation order 38-82135B01 battery retainer button)

H11, 13 BNC (Fig. F)

PART NUMBER	DESCRIPTION
NLN6116A	Contains four, 4 volt mercury batteries
NLN6117A	Contains two nickel-cadmium batteries

PAGEBOY II A03DNC, A03CAC (Fig. G)

PART NUMBER	DESCRIPTION
60-82168J01	1.4 volt mercury battery for tone and voice pager (A03DNC). Replaces NLN-6199A.
NEN-6034A	Contains 20, 1.4 volt mercury batteries for tone and voice pager (A03DNC).
60-5104A01	1.3 volt nickel-cadmium battery for tone and voice pager (A03DNC). Replaces NLN-6965A.
NLN-8276A	Adaptor kit, consists of 60-05104A01 battery and 1-05953A16 adapter, 1.3 volts nickel-cadmium for tone only pager (A03CAC).
NLN-8519A	Adaptor only for above. Consists of 1-05953A16.
60-5309A01	1.4 "AA" mercury battery for tone only pager (A03CAC). Replaces NLN-8277A.
60-5104A01	Alkaline battery 1.5 volt for tone only pager (A03CAC). Replaces NLN-8278A.

PAGE-COM, A03EAC (Fig. H)

PART NUMBER	DESCRIPTION
60-82168J01	1.4 volt mercury battery for VHF "Page Com." (Replaces NLN-6199A).
60-5104A01	1.2 volt nickel-cadmium battery for VHF "Page Com." (Replaces NLN-6965A).

Miscellaneous Batteries

PART NUMBER	DESCRIPTION
SLN6079A	(1) 22.5 Volt 60B82457B01 and (1) 1.5 Volt 60B82458B01 for S1052B DC Multimeter
SLN6099A	(1) 8.4 Volt 60B82292H01, mercury for S-1051C AC Voltmeter
NLN6586A	(1) 10.0 Volt 60C83605E01 for M01, M03CNB
NLN6607A	(1) 10.0 Volt 60C83893E01 for Z13, 14ULN
NLN6267A	(1) 14.0 Volt Nickel-Cadmium 60D82447G01 for C1100 series crane control

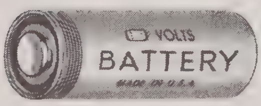
Batteries

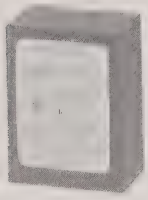
PORTABLE BATTERIES

Motorola batteries are specially selected for high quality characteristics necessary in critical electronic and communications equipment applications. Close attention to rapid stock turnover and ideal storage conditions assure the user of freshness at all times. An extensive line of battery types for most communications needs gives the widest possible choice and assures immediate availability and prompt delivery.

PART NO.	OTHER NUMBERS BURGESS	OTHER NUMBERS EVEREADY	VOLTS	SIZE IN INCHES	TERMINAL
60B82458B01	130	—	1½	1.005 diam. x 1.950	Flashlight "C"
60A82455G01	210	1150 (was 1050)	1½	1.343 diam. x 2.406	Industrial "D"
60-84306A66	Z	915	1.5	2 x .50	Penlight
60B855262	NE	904	1½	.439 diam. x 1.180	
48B800319	4F	742	1½	2⅝ x 2⅝ x 4⅛	2 Hole Socket
60B82104C01	4D	—	1½	2.65 x 2.65 x 2.8	2 Hole Socket
60A480415	2F	W353	1½	2 19/32 x 1⅜ x 4¼	2 Hole Socket
60T847888	F4P1	744	6	2 21/32 x 21/32 x 4⅛	2 Hole Socket
60B848432	A4	—	6	1 9/32 x 1 9/32 x 11/32	Flat Contact
60C83520B01	MN-1400	E-93	1½	1.031 x 1.937	Flashlight "C"
60T847629	C5	717	7½	2 7/32 x 1 5/16 x 3 1/32	3 Hole Socket
60B82282C01	2U6	216	9	1.9 x 1.03 x .68	Snap Type
60B82457B01	4156	—	22½	3.5 x 2.87 x 2.06	Screw Terminals
60A824625	U20	413	30	1 1/32 x ⅝ x 2 9/16	Flat Contact
60B82145C01	Z30	738	45	3 x 2.3 x 4.06	6 Hole Socket
48A800451	M30	482	45	3 9/16 x 1¾ x 5½	6 Hole Socket
60B852117	XX45, V45	467	67½	2¾ x 1⅜ x 3 21/32	Snap Type
60T847252	K45	457	67½	2 11/16 x 1 5/16 x 2¼	Snap Type

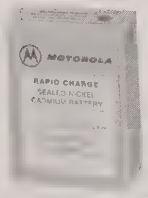
MERCURY BATTERIES

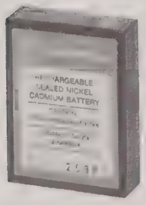




PART NO.	VOLTS	CAPACITY MaH	HEIGHT INCHES	DIA.	TERMINAL	OTHER NUMBERS	NO. OF CELLS IN SERIES
60-82168J01 (Replaces 60-82936C01)	1.4	800	1.120	.460	Flat	E401	1
60-84306A65	1.5	—	2	.532	Penlight	E9	1
60K868968	2.5	1000	1.305	.655	Flat	E132 TR132R	2
60K868967	4.0	1000	1.960	.655	Flat	E133 TR133R	3
60B863919	6.5/7.0	1000	3.250	.655	Flat	TR135R	5
60K82292H01	8.4	1000	3.900	.662	Flat	TR136	6
60-82357J01	1.4	2400	1.953	.535	Flat	RM15	1
60-82389J01	1.5	1000	1.969	.562	Flat	E91	1
60-82168J01	1.4	800	1.120	.462	Flat	9R81	1
60-84342H01	16.2	1800	2.76x2.17x1.265	—	Flat	303858	—

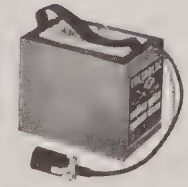
NICKEL-CADMIUM BATTERIES





PART NO.	VOLTS	CAP. MaH	OTHER NO.'S	KIT NO.
NLN6267A	14	780	N65	NLN6267A
60D83009H01	2.5	140	EIA 183	NLN6394A
60C82179B01	4.0	75	—	NLN6099A
60D83009H02	3.75	140	EIA 183	NLN6431A
60D83009H03	7.5	140	EIA 183	NLN6117A
NLN-6682A (Replaces 60-83310H01)	15.6	225	—	NLN6682A
60C83464D01	14.4	132	—	ZLN6091A
60-82132J01 (Replaces 60-83605E01)	10	390	X5184	NLN6586A
60C83893E01	10	132	—	NLN6607A
NLN-6781B (Replaces 60-84184H01)	16.5	55	—	NLN6781B
60-84636H01	15.8	225	—	NLN-6900A
60-84735H01 (Similar to "Eveready" N-64)	15.6	500	—	NLN-6238A

NICKEL-CADMIUM BATTERY



6 volt, rechargeable Ni-Cad Battery, designed for use with "H" and "P" series radiophones. Hermetically sealed and does not require the addition of electrolyte during its service life.

NLN6134A (was NK127) Ni-Cad Battery

Cross Reference Charts

"UHF" COAXIAL CONNECTORS

DESCRIPTION	TYPE	DIELECTRIC	MOTOROLA PART NO.	MIL SPEC NO.	AMPHENOL PART NO.	REMARKS
RG-8/U Cable Conn.	M	D.P.	28K42310	PL-259	—	
RG-8/U Cable Conn.	M	D.P.	28A83396C01	PL-259	—	Black Nickel
RG-8/U Cable Conn.	M	Tef.	28C82021G01	PL-259	83-822	
Reducer for RG-58/U	—	—	58K854020	UG-175/U	83-185	
Reducer for RG-59/U	—	—	58K848363	UG-176/U	83-186	
Chassis Mount	F	Phen.	9K85615	SO-239	83-IR	
Chassis Mount	F	D.P.	9C82442E03	SO-239	—	
Chassis Mount	F	P.S.	9A816368	SO-239	83-IRTY	
Chassis Mount	F	Tef.	9C82442E01	SO-239A	83-798	
Chassis Mount	F	Cer.	9B82941B01	—	83-716	Pressurized
Chassis Mount	F	Phen.	9K867432	—	83-876	Oval Flange
Chassis Mount	F	Phen.	9C82442E04	—	—	Oval, Blk. Nickel
Chassis Mount	F	D.P.	9C82442E07	—	—	Oval Flange
Chassis Mount	F	Tef.	9C82442E06	—	—	Oval Flange
Feed-Thru	F-F	P.S.	58A109152	PL-258	83-IJ	
Feed-Thru	F-F	P.S.	58A475273	UG-363/U	83-IF	Bulkhead
Feed-Thru	F-F	P.S.	58B83847A01	—	—	Large Flange
Right Angle	M-F	P.S.	28A48250	UG-646/U	83-IAP	
Right Angle	M-F	P.S.	28A83688C01	—	—	Black Nickel
Tee	F-M-F	P.S.	9A86150	M-358	83-IT	
Adaptor (BNC-F)	M	Rex.	58B855270	UG-273/U	31-028	
Adaptor (BNC-M)	F	Rex.	58P84300A99	UG-255/U	2900	
Adaptor (N-M)	F	Rex.	58A82273C01	UG-146/U	4400	
Adaptor (N-F, Tef.)	M	Rex.	58P83150D01	UG-83/U	14000	

"N" COAXIAL CONNECTORS

DESCRIPTION	TYPE	DIELECTRIC	MOTOROLA PART NO.	MIL SPEC NO.	AMPHENOL PART NO.	REMARKS
*RG-8/U Cable Conn.	M	Tef.	28B84603A01	UG-1185/U	82-312	Improved, captivated
*RG-8/U Cable Conn.	M	Tef.	28B82809C02	UG-1185/U	82-312	Improved, captivated
RG-8/U Cable Conn.	M	Tef.	28A808256	UG-21B/U	82-61	Mod. Clamp
*RG-8/U Cable Conn.	F	Tef.	9B84602A01	UG-1186/U	82-313	Improved, captivated
*RG-8/U Cable Conn.	F	Tef.	9B83127D01	UG-1186/U	82-313	Improved, captivated
RG-8/U Cable Conn.	F	Tef.	28B83059A01	UG-160A/U UG-160B/U	82-67 82-93	Bulkhead
RG-8/U Cable Conn.	M	Tef.	28K844859	—	82-835	Right Angle
*RG-58/U Cable Conn.	M	Rex.	28A852527	UG-536/U	34000	
*RG-58/U Cable Conn.	M	Rex.	28A83055A01	UG-536/U	34000	
RG-58/U Cable Conn.	F	Rex.	9B82443E01	—	35000	
RG-58/U Cable Conn.	F	Tef.	9B84568A01	UG-556B/U	35275	Bulkhead, Improved
RG-58/U Cable Conn.	F	Tef.	28B83059A02	UG-556/U	35250	Bulkhead
RG-59/U Cable Conn.	M	Rex.	28B82809C01	UG-603/U	34500	
Chassis Mount	F	Tef.	9A816159	UG-58/U	82-24	
Chassis Mount	F	Tef.	9A82741A01	UG-58A/U	82-97	Modified Const.
Chassis Mount	F	Tef.	9B82415E01	—	—	No flange
Feed-Thru	F-F	Tef.	58A82764A01	UG-29A/U	82-65	
Feed-Thru	F-F	Rex.	9B83599H01	UG-30/U	82-66	Bulkhead, pressurized
Right angle	M-F	Tef.	28A817985	UG-27A/U	82-64	
Feed-Thru	M-M	Tef.	58B844807	UG-57B/U	82-100	
Adaptor (UHF-F)	M	Rex.	58A82273C01	UG-146/U	4400	
Adaptor (UHF-M, Rex.)	F	Tef.	58P83150D01	UG-83/U	14000	
Adaptor (BNC-F)	M	Tef.	58P84300A98	UG-201A/U	31-216	

*Pairs so marked are identical

"BNC" COAXIAL CONNECTORS

DESCRIPTION	TYPE	DIELECTRIC	MOTOROLA PART NO.	MIL SPEC NO.	AMPHENOL PART NO.	REMARKS
RG-58/U Cable Conn.	M	Tef.	28K844876	UG-88/U	31-002	
RG-58/U Cable Conn.	F	Tef.	9B855269	UG-89/U	31-005	
*RG-58/U Cable Conn.	F	Tef.	9B84567A01	UG-909/U	31-206	Bulkhead, Improved
*RG-58/U Cable Conn.	F	Tef.	9B83589A01	UG-909/U	31-206	Bulkhead, Improved
RG-58/U Cable Conn.	M	Tef.	28C83439H01	—	38250	Right Angle
RG-58/U Cable Conn.	—	Tef.	58B82999E01	—	—	Tee
*RG-59/U Cable Conn.	M	Rex.	28B82872D01	UG-260/U	31-012	
*RG-59/U Cable Conn.	M	Rex.	28B868439	UG-260/U	31-012	
RG-59/U Cable Conn.	M.	Tef.	28B84026B01	UG-260B/U	31-212	Improved
RG-11/U Cable Conn.	M	Tef.	28B82808C01	UG-959A/U	—	
Chassis Mount	F	Rex.	9A844508	UG-185/U	4500	
Chassis Mount	F	Tef.	9C83415H01	—	31-842	
Chassis Mount	F	Tef.	9C83416H01	UG-535/U	5675	Right Angle
Chassis Mount	M	Tef.	28B82992D01	—	3150	
Bulkhead Mount	F	Rex.	9B855268	UG-657/U	31-102	Pressurized
Feed-Thru	F-F	Tef.	58A82577B01	UG-914/U	31-219	Improved
Feed-Thru	M-M	Tef.	58A82777A01	UG-491A/U	31-218	Improved
Tee	F-M-F	Rex.	9A82578B01	UG-274/U	31-008	
Adaptor (UHF-M)	F	Rex.	58B855270	UG-273/U	31-028	
Adaptor (UHF-F)	M	Rex.	58P84300A99	UG-255/U	2900	
Adaptor (N-M)	F	Tef.	58P84300A98	UG-201A/U	31-216	

*Pairs so marked are identical

PHONO COAXIAL CONNECTORS

DESCRIPTION	TYPE	DIELECTRIC	MOTOROLA PART NO.	I.D.	MANUFACTURER
Cable Connector	M	XXP	28A474006	.176	Cinch #15H12877
Cable Connector	M	XXP	28K849416	.125	Cinch
Cable Connector	M	Tef.	28B82331G01	.125	Switchcraft
Cable Connector	M	Tef.	28B82331G02	.177	Switchcraft
Cable Connector	M	XXXP	28B82331G03	.125	Switchcraft, wall able
Cable Connector	M	XXXP	28A82365D01	Lug	Switchcraft #3C-1064
Cable Connector	M	XXXP	28A82365D02	Lug	Switchcraft #XA-17289
Cable Connector	M	Rubber	28K639662	.176	Conn. Corp. #610B2R
Cable Connector	M	Fiber	28B745885	.172	Cinch #M-95
Cable Connector	M	XXP	28K745379	.176	
Cable Connector	M	XXP	28K743840	.176	Cinch #15H12877
Cable Connector	M	P	28K740327	.127	.093 Pin, Mandex 3-1511
Cable Connector	M	Fiber	28K735945	.187	Cinch #Exp 9340
Cable Connector	M	Fiber	28K731154	.176	Cinch #1338
Cable Connector	M	Fiber	28K71775	.176	Cinch #15H11855
Cable Connector	M	Fiber	28K22183	.127	Cinch #M-93
Cable Connector	M	Steel	28K736072	—	Short, Cinch #3-1234
Chassis Mount	F	Ceramic	9C84135B01	—	Knurled
Chassis Mount	F	Ceramic	9C83663C01	—	Switchcraft #P-1269-2
Chassis Mount	F	Ceramic	9B82323G01	—	Switchcraft #P-1269-1
Chassis Mount	F	Phen.	9C87120	—	Cinch #14H12699

Connectors and Plugs

UHF & TYPE "N" CONNECTORS

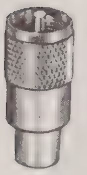


Fig. A

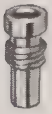


Fig. B

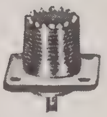


Fig. C

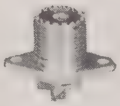


Fig. C-1

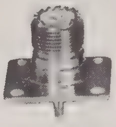


Fig. C-2

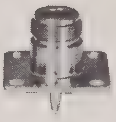


Fig. C-3

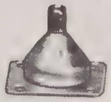


Fig. C-4

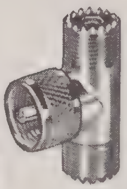


Fig. D

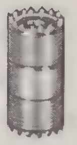


Fig. E

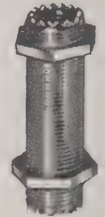


Fig. E-1

Fig. F

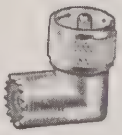


Fig. G

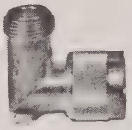


Fig. G-1

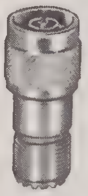


Fig. H

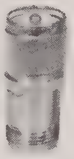


Fig. H-1

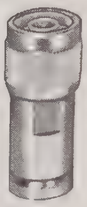


Fig. I

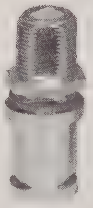


Fig. I-1

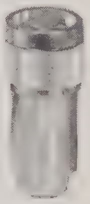


Fig. J

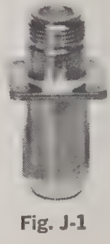


Fig. J-1

MIL OR OTHER NO.	FIG.	DESCRIPTION	PART NUMBER
PL259	A	Plug for RG8/U, RG9/U, 11/U Mica filled insulation.	28-42310
PL259	A	Plug for RG8/U, RG9/U, 11/U Teflon Insulation	ST-957
UG175/U	B	Reducer used with PL259 For RG58/U, RG142/U .207 I.D.	58-854020
UG176/U	B	Reducer used with PL259 For RG58/U, RG142/U. .255 I.D.	58B 848363
SO-239	C	Receptacle UHF	9A 85615
	C	Receptacle "N"	9A 82741A01
SO-239A	C	Receptacle UHF Teflon Insulation	9C 82442E01
	C-1	Receptacle UHF	9K 867432
	C-1	Receptacle UHF Teflon Insulation	9C 82442E06
	C-1	Receptacle UHF Diallyl Phthalate Insulation	9C 82442E07
424050	C-2	Connector UHF 1¼" Flange (For Bird 43 Wattmeters)	ST-1000
424062	C-3	Connector "N" 1¼" Flange (For Bird 43 Wattmeters)	ST-999
UG177/U	C-4	Shield for Fig. C Cable Size .116	15B 483599
UG106/U	C-4	Shield for Fig. C Cable Size .285	15A 82582H01
M358	D	"Tee" UHF	9A 86150
PL258	E	Straight-through UHF	58A 109152
PL274	E-1	Straight-through UHF	58A 475273
UG-29A/U	F	Straight-through "N"	58A 82764A01
UG646/U	G	Right Angle UHF	28A 48250
UG-27/AU	G-1	Right Angle "N"	28A 817985

MIL OR OTHER NO.	FIG.	DESCRIPTION	PART NUMBER
UG146/U	H	Male "N" and Female UHF Adapter	58A 82273C01
UG-83/U	H-1	Male UHF and Female "N" Adapter	58P 83150D01
UG603/U	I	Male "N" Plug for RG59/U	28B 82809C01
UG21B/U	I	Male "N" Plug for RG8/U, 11/U	28B 808256
82-312	I	Male "N" Plug for UG/11U, RG8/U, 9/U, 213/U, 214/U and 225/U Cable Hole .444 Teflon Insulation	ST-959
UG-556B/U	I-1	Female "N" for RG58A/U Cable Hole .214	28B 83059A02
UG-536/U	J	Male "N" Plug for RG58A/U Cable Hole .212	28K 852527
UG-1052/U	J-1	Female "N" Connector Special for TU576 and T-1034, 35 and 36 Series Generators	9K 857036

BSM CONNECTORS

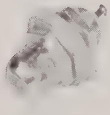


Fig. A

Fig. B

MIL OR OTHER NO.	FIG.	DESCRIPTION	PART NUMBER
01431T	A	Male Bulkhead Connector (BSM)	28B 82156E01
RF-0721-54	B	Female Connector for RG54, 55, 58, 58A, 58B, 58C, and 141/U Teflon Insulation	9B 82139E01

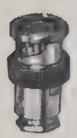


Fig. K

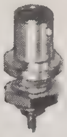
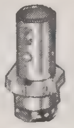


Fig. L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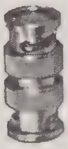
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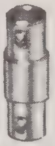
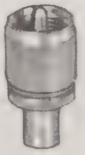


Fig. O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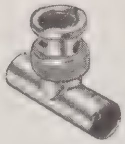
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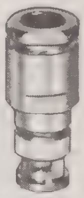
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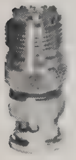


Fig. S

Fig. T

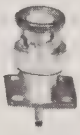


Fig. U

BNC CONNECTORS

MIL OR OTHER NO.	FIG.	DESCRIPTION	PART NUMBER
UG88/U	K	Plug for RG58/U	28B 844876
UG260/U	K	Plug for RG59/U	28B 868439
UG657/U	L	Chassis Receptacle	9B 855268
UG89/U	M	Jack for RG58/U	9B 855269

MIL OR OTHER NO.	FIG.	DESCRIPTION	PART NUMBER
UG491A/U	N	Male Straight Adapter	58A 82777A01
UG914/U	O	Female Straight Adapter	58A 82577B01
UG273/U	P	Male UHF Female BNC Adapter	58B 855270
UG274/U	Q	"TEE"	9A 82578B01
UG959A/U	R	Male Plug for RG11/U	28B 82808C01
UG-255/U	S	Female UHF and Male BNC Adapter	58P 84300A99
UG201A/U	T	Male "N" and Male BNC Adapter	58P 84300A98
RF-0482	U	Male BNC Receptacle	28B 82992D01

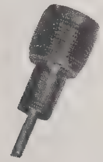


Fig. A

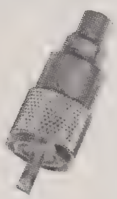


Fig. B

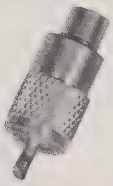


Fig. C

ANTENNA ADAPTERS

FIG.	DESCRIPTION	PART NO.
C	Male UHF and female auto	58A 82103D01
B	Male UHF and phone receptacles	58A 82896G01
A	Male Auto antenna and female UHF	58A 82104D01

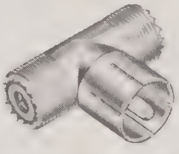


Fig. A

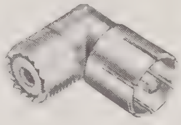


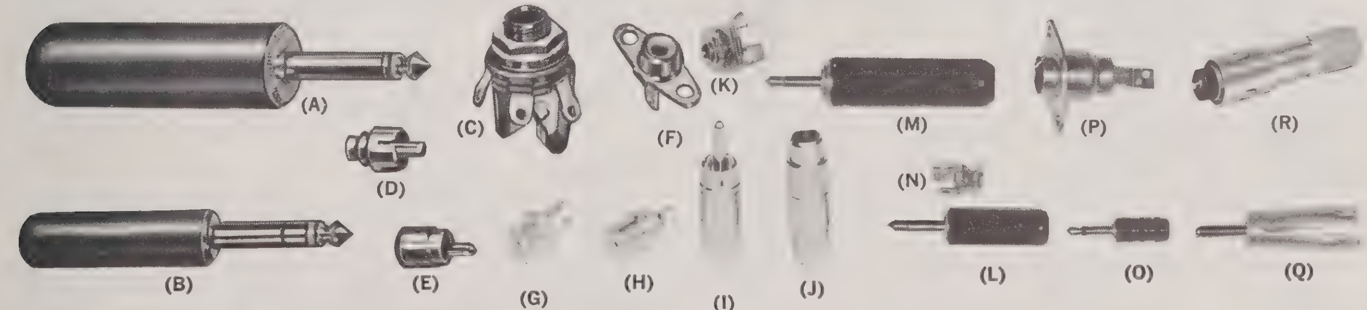
Fig. B

Fig. C

"QUICK CHANGE" CONNECTORS

Just "push 'em on or pull 'em off." They save time by eliminating the "threading-on" of Standard UHF connectors used in routine servicing.

FIG.	DESCRIPTION	PART NUMBER
A	"Quick Change" "T" Connector	58P 82350D01
B	"Quick Change" Right Angle Connector	58P 82350D02
C	"Quick Change" Ferrule only for PL259 (28A42310) Connector	58A 82093E01

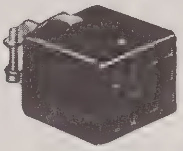


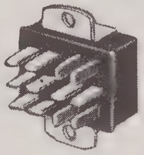
PHONO/PHONE PLUGS AND JACKS

DESCRIPTION	FIG.	PART NO.
Phone Plug (Black) Large Body. 2 circuit	A	28A 19484
Phone Plug (Red) 2 circuit	B	28A 804789
Phone Plug (Black) 2 circuit	B	28A 804790
Phone Plug (Black) 3 circuit	B	28A 855277
Phone Plug (Red) 3 circuit	B	28A 855278
Jack, Open circuit 2 circuit	C	9A 20261
Jack, Closed circuit 2 circuit	C	9K 85656
Jack, Open circuit 3 circuit	C	9B 82281C01
Plug	D	28-82331G01
Phono jack	E	9K 87120
Phono jack	F	9-642235
Printed circuit phono jack	G	9-82615F01
Phono jack (Press-fit into .32 dia. hole)	H	9-84135B01
Plug, phono (cable type)	I	28-84303A80
Phono jack (cable type)	J	9-84303A81
Jack, miniature normally closed for parallel operation	K	9A 82100A01
Jack, miniature normally closed for disconnect operation	K	9A 82670B01
Phone Plug (for Jack "K")	L	28A 82081C01
Phone Plug (for Jack "K") large barrel	M	28A 82537C01
Jack, sub-miniature, normally closed for disconnect operation	N	9A 82684D01
Plug, sub-miniature (for Jack "N")	O	28A 82220E01
Jack, antenna—auto radio type	P	9A 82751C01
Plug, antenna—auto radio type	Q	29-580544
Cigar Lighter Plug	R	28-82620C01

Sockets and Plugs

JONES SERIES 300 MATING SOCKETS AND PLUGS





Chassis Plug (Male)

MOTOROLA PART NO.	TYPE	CONTACTS
28A 812540	P-302-AB	2
28A 893284	P-304-AB	4
28A 84886	P-306-AB	6
28A 881246	P-308-AB	8
28A 483376	P-312-AB	12
28B 821728	P-315-AB	15
28A 893612	P-318-AB	18

Chassis Socket (Female)

MOTOROLA PART NO.	TYPE	CONTACTS
9A 891118	S-302-AB	2
9A 801241	S-304-AB	4
9A 898284	S-306-AB	6
9A 800449	S-308-AB	8
9A 82732	S-312-AB	12
9A 891537	S-315-EB	15
9A 898910	S-318-AB	18

Cable Socket (Female) w/Cable Clamp

MOTOROLA PART NO.	TYPE	CONTACTS
9B 865701	S-302-CCT	2
9B 893290	S-304-CCT	4
9A 84885	S-306-CCT	6
9A 881245	S-308-CCT	8
9A 880725	S-312-CCT	12
9B 823659	S-315-CCT	15
9A 893613	S-318-CCT	18

Cable Plug (Male) w/Cable Clamp

MOTOROLA PART NO.	TYPE	CONTACTS
28A 891117	P-302-CCT	2
28A 898881	P-304-CCT	4
28A 898285	P-306-CCT	6
28A 800657	P-308-CCT	8
28A 82737*	P-312-	12
28B 891298	P-315-CCE	15
28B 890846	P-318-CCT	18

* Does not include Housing and Cable Clamps.

Order separate ....15A 82739 Housing
14A 82738 Insulator
47A 82735 Pins (2 Req.)
42A 82740 Clamp

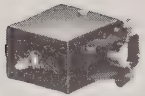


Fig. A

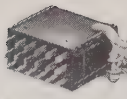


Fig. B

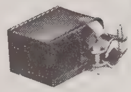


Fig. E

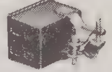


Fig. D

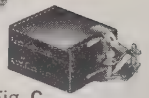
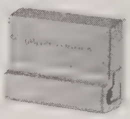
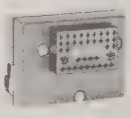


Fig. C

STANDARD MOTOROLA CONTROL AND POWER CONNECTORS

PART NO.	FIG.	DESCRIPTION
1V 80715A24	A	19 contact female connector complete w/housing, thumb screw and cable clamps (Plastic housing.)
28B 890846	B	18 contact male plug w/housing used on all control cables for 15" housing mobiles.
9C 830033	C	6 contact female connector w/housing used on 12 volt power cable for T51G, etc.
9C 865123	C	8 contact female connector w/housing used on 12 volt power cable for T51GGD.
9B 800566	D	4 contact female connector w/housing used on power cable for front mtg. uni-channel.
9B 834756	E	6 contact female connector w/housing used on power cable for front mtg. D41, 43GGV, etc.



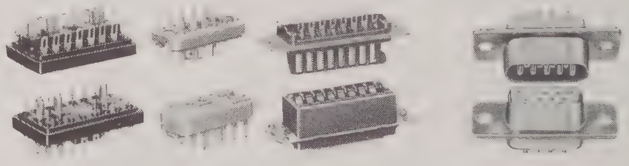


Micor

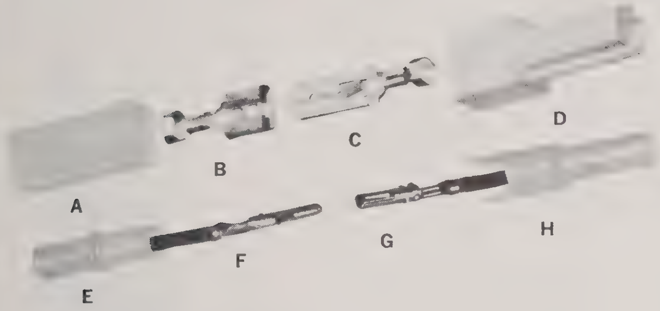
PART NO.	DESCRIPTION
1-84307A89	Female connector for Micor control cable includes 20 contacts

MATING SOCKETS AND PLUGS

for Mobile, "Handie-Talkie," Industrial "Dispatcher" & Motorcycle Radio Units



PART NO.	FIG.	DESCRIPTION
9C 801050	A	19 Contact Female Socket
28B 802820	A	19 Contact Male Plug
9B 804795	B	15 Contact Female Socket (Old "Handie-Talkie" Radio)
28B 804796	B	15 Contact Male Plug (Old "Handie-Talkie" Radio)
9B 848291	C	16 Contact Female Socket "Handie-Talkie" Radio)
28B 847027	C	16 Contact Male Plug "Handie-Talkie" Radio)
9-82847E01	D	9 contact female socket (used on H23DDC series HT)
28-82846E01	D	9 contact male connector (used on H23DDC series HT)
9B 851573	Similar to C	24 Contact Female Socket (Industrial "Dispatcher"—Motorcycle Radio)
28B 851574	Similar to C	24 Contact Male Plug (Industrial "Dispatcher"—Motorcycle Radio)
9-82152G01	Similar to C	32 contact female socket
28-82148G01	Similar to C	32 contact male plug



SINGLE CONTACT IN-LINE INSULATORS

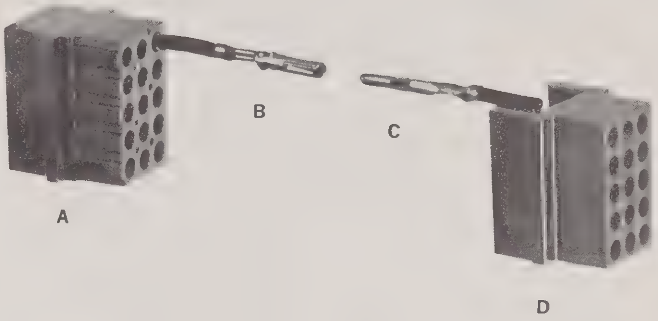
PART NO.	FIG.	DESCRIPTION
14-859051	A	Insulator
29-859118	B	Female contact
29-82109E01	C	Male contact
14-82108E01	D	Insulator
14-83799G01	E	Insulator
39-83797G01	F	Male contact
39-83798G01	G	Female contact
14-83799G02	H	Insulator

PK-497 Consists of 5 each of above insulators and 10 each of above contacts.

CRIMP-ON PIN CONTACTS AND TOOL

Standard pin-tip contact that can be installed in a matter of seconds with special tool listed below.

29-4080C03	Standard .092 diameter crimp on pin
66-4491A01	Installation tool



MATING RECEPTACLES AND PLUGS

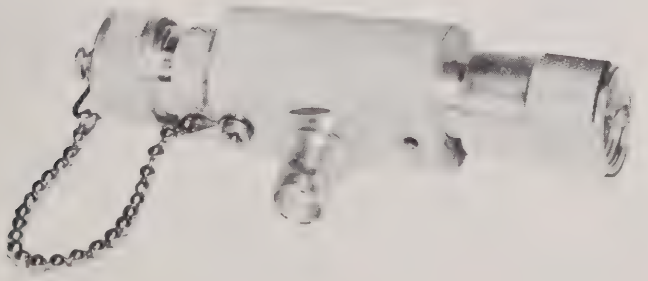
PART NO.	FIG.	DESCRIPTION	MARKING
14-82917B01	A	12 contact socket	None
14-82337A01	D	12 contact plug	None
14-83783A04	A	15 contact socket	M-R
14-82337A05	D	15 contact plug	None
14-83783A01	A	18 contact socket	A-F
14-82337A07	D	18 contact plug	A-F
14-83783A03	A	24 contact socket	A-H
14-82337A09	D	24 contact plug	A-H
14-83783A09	A	33 contact socket	A-L
14-82337A12	D	33 contact plug	A-L
14-83580A01	A	36 contact socket	None
14-82337A06	D	36 contact plug	None
14-83783A07	A	42 contact socket	A-O
14-82337A10	D	42 contact plug	A-O
29-82336A01	B	Female terminal	
29-82335A01	C	Male terminal	

EXTRACTOR TOOL

This automatic extractor tool enables you to remove broken wire terminals from damaged plugs or connectors. Simply slip the barrel of the tool over the terminal, press in, and a pin releases the terminal from the base, without damaging the connector.

ST-946 Automatic Extractor Tool

Throughline Coupling Unit with Adjustable Tap-Off



This unique male and female UHF, throughline coupling unit features an adjustable BNC female tap-off. Use it with any frequency meter to monitor the output of low or medium power mobiles. Ideal for use with any Frequency Meter.

Simply insert the coupling unit in series with the r-f cable going to the wattmeter or dummy load. Depending on output power, loosen the jam nut and rotate the BNC tap-off to obtain the desired attenuation coupling.

Order **Model SLN6321A**

Sockets and Shields

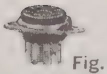
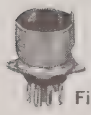


Fig. A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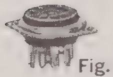


Fig. C

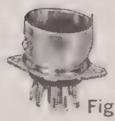


Fig. D

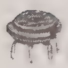


Fig. E

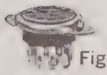


Fig. F

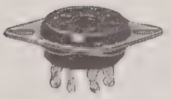


Fig. G

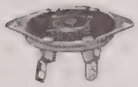


Fig. J

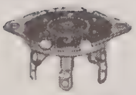
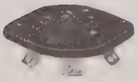


Fig. K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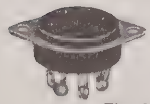


Fig. M

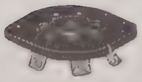


Fig. N

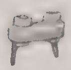


Fig. O

PART NO.	DESCRIPTION
9B 87123	7-Contact Black Bakelite. Fig. A.
9B 87124	7-Contact Tan Bakelite Fig. A.
9K 849460	7-Contact Black Bakelite w/Tube Shield Base. Fig. B.
9B 834083	7-Contact Tan Bakelite w/Tube Shield Base Fig. B.
9B 86868	9-Contact Black Bakelite. Fig. C.
9K 825586	9-Contact Tan Bakelite Fig. C.
9K 881243	9-Contact Tan Mica Bakelite w/Tube Shield Base. Fig. D.
9C 857351	7-Contact Printed Ckt. Type used on "Motrac" Radio Fig. E.
9C 858152	9-Contact Printed Ckt. Type used on "Motrac" Radio Fig. E.
9C 82201E01	12-Contact Metering Socket "Motrac" Radio. Fig. F.
9B 6752	Octal, Black Molded Bakelite. Fig. G.
9K 6773	Octal, Tan Molded Bakelite. Fig. G.
9-70208	4-Contact Wafer Type For 48B 880261 Vibrator and 4 Prong Tubes. Fig. J.
9K 6748	6-Contact Wafer Type For 48B800145 Vibrator and 6 Prong Tubes. Fig. K.
9A 83953	7-Contact Wafer Type for 48B 803700 Vibrator. Fig. L.
9A 6776	7-Contact Molded Type for 48C847730, 48C830032 Vibrators. Fig. M.
9A 893515	7-Contact Wafer Type for 48B 893518 Vibrator. Fig. N.
9A 824969	Steatite Socket for .486" Spaced, .050 Dia. Pins. Fig. O.

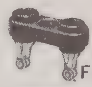
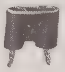


Fig. P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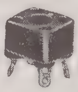


Fig. R

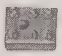


Fig. S

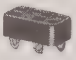


Fig. T

Fig. U

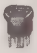


Fig. V

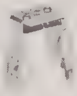


Fig. W

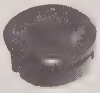


Fig. X

Fig. Y

PART NO.	DESCRIPTION
9K 82810	2-Contact Socket for .750" Spaced, .125" Dia. Pins. Fig. P.
9K 857509	2-Contact Socket for .486" Spaced, .090" Dia. Pins. Fig. Q.
9A 857508	4-Contact Socket for .486" Spaced, .090" Dia. Pins. Fig. R.
9C 855941	6-Contact Socket for 2 Freq. Crystal Ovens Fig. S.
9A 82050A01	4-Contact Socket for "Vibrasenders" & "Vibrasponders" Fig. T.
9B 831135	5-Contact Socket for Sub-Miniature Tubes Fig. U.
9A 804942	8-Contact Socket for 6BF7 & 6BG7 Type Tubes. Fig. V.
9-84000B02	For use on tone remote control consoles-vibrasender socket. Fig. W.
9A 893224	Female 2 contact AC receptacle. Fig. X.
28A 893223	Male 2 contact plug (not shown)
42A 821428	Chassis Locking Ring. Fig. Y.

METERING SOCKETS AND PLUGS

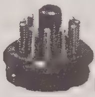


Fig. A

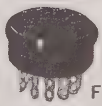


Fig. B

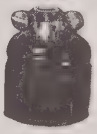


Fig. C

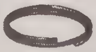


Fig. D

Fig. E

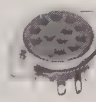


Fig. F

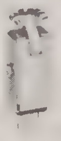


Fig. G

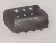


Fig. H

PART NO.	DESCRIPTION
28A 813576	Male Plug, 11 Pin Molded Phenolic Fig. A.
9A 86864	Female Receptacle 11 Contact w/Snap Ring. Fig. B.
15A 483149	Shell for 11 Contact Connectors w/Cable Clamp. Fig. C.
15A 475055	Shell for 11 Contact Connectors less Clamp. Fig. C.
41A 483715	Locking Ring for All Above Shells. Fig. D.
1V 80754A26	Metering plug for "Motrac" radio 12 pin. Includes housing, clamps, and screws. Fig. E.
9C 82201E01	Socket for "Motrac" radio metering plug shown above (12 pin) Fig. F.
1-84258C54 (CLR) 1-84258C55 (RED)	Metering plug for Micor (7 Pin) includes housing, clamps, screws and sleeving. Fig. G.
9-84207B01	Socket for Micor Metering plug. Fig. H.

SOCKETS AND CONTACTS PORTABLE VIBRASENDER/VIBRASPONDER

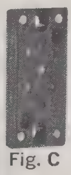


Fig. C

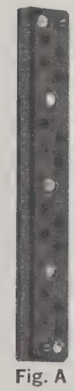


Fig. A

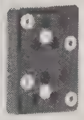


Fig. B

PART NO.	DESCRIPTION
1V80733A51	Reed Socket Assembly Fig. A.
1B82520C01	Reed Socket Assembly Contact Length .075 to .095 Fig. B.
1B82520C02	Reed Socket Assembly Contact Length .185 to .205 Fig. B.
1V80748A70	Reed Socket Assembly Fig. C.
39A82764D01	Reed Contact (used in printed circuit boards where Reed Sockets are not used.)

Standard microphone connectors

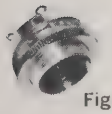


Fig. A

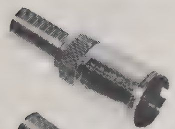


Fig. B

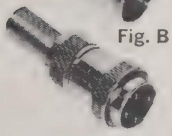
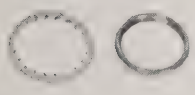


Fig. C

Fig. D



PART NO.	DESCRIPTION
9B 16345	4 contact chassis female receptacle
9A 881071	6 contact chassis female receptacle Fig. A.
9-84509H01	6 prong chassis male connector
9A 831337	4 contact cable female receptacle
9A 800636	6 contact cable female receptacle Fig.B.
28A 16370	4 prong cable male connector
28A 881072	6 prong cable male connector Fig. C.
4S 7699	Lockwasher for chassis receptacles
2A 81180	Chrome plated ring nut (large)
2A 482070	Nickel plated ring nut (small) Fig. D.

Pintip receptacle

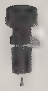


Fig. I

PART NO.	DESCRIPTION	
9A 833982	Black	Fig. I.
9A 833983	Red,	

Right angle pintip plug

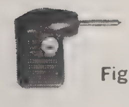


Fig. J

PART NO.	DESCRIPTION	
28A 82675C01	Black	Fig. J.
28A 82675C02	Red,	

Heavy duty connectors and plugs

Large, heavy duty type connectors intended for use with power supplies, test cables, battery chargers, etc.

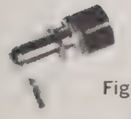


Fig. K

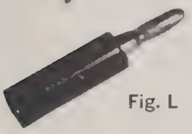


Fig. L

PART NO.	DESCRIPTION	
9K 868662	Receptacle, black	Fig. K.
9K 868661	Receptacle, Red	
28K 868660	Plug, black,	Fig. L.
28K 868659	Plug, red,	

Fig. M

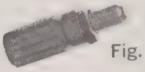


Fig. N

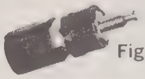


Fig. O

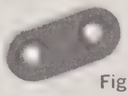


Fig. P

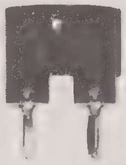


Fig. Q

Binding post type receptacles

PART NO.	DESCRIPTION	
46B 861855	Black	Fig. M.
46B 861857	Red,	
46K 863924	Black	Fig. N.
46K 863925	Red,	
46K 865778	Black	Fig. O.
46K 865779	Red,	
14K 83734D01	Mounting insulator for positioning Fig. O for standard ¾″ spacing, Fig. P.	
28A 804791	¾″ Dual plug. Fig. Q.	

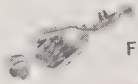


Fig. R

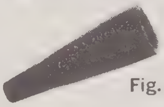


Fig. S

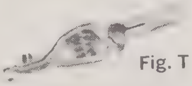


Fig. T

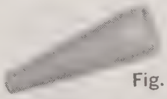


Fig. U

Fig. V

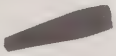


Fig. W

Test clips and insulators

PART NO.	DESCRIPTION	
42A 82019G01	Mesh tooth type Fig. R.	
14A 82020G01	Insulator, black,	Fig. S
14A 82020G02	Insulator, red,	
42A 82455B01	Crocodile type, Fig. T.	
14A 82456B01	Insulator, black	Fig. U.
14A 82456B02	Insulator, red,	
42A 865697	"Minigator" type, Fig. V.	
14A 865698	Insulator, black	Fig. W.
14A 865699	Insulator, red,	

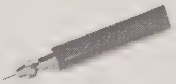


Fig. X

Test Prods, Needle Type

PART NO.	DESCRIPTION	
29A 82676C01	Black	Fig. X.
29A 82676C02	Red,	

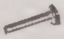


Fig. Y

Speaker pins

PART NO.	DESCRIPTION
29R 5402	Black .156″ pin, Fig. Y.
29-82072D01	.125″ pin

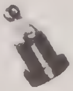
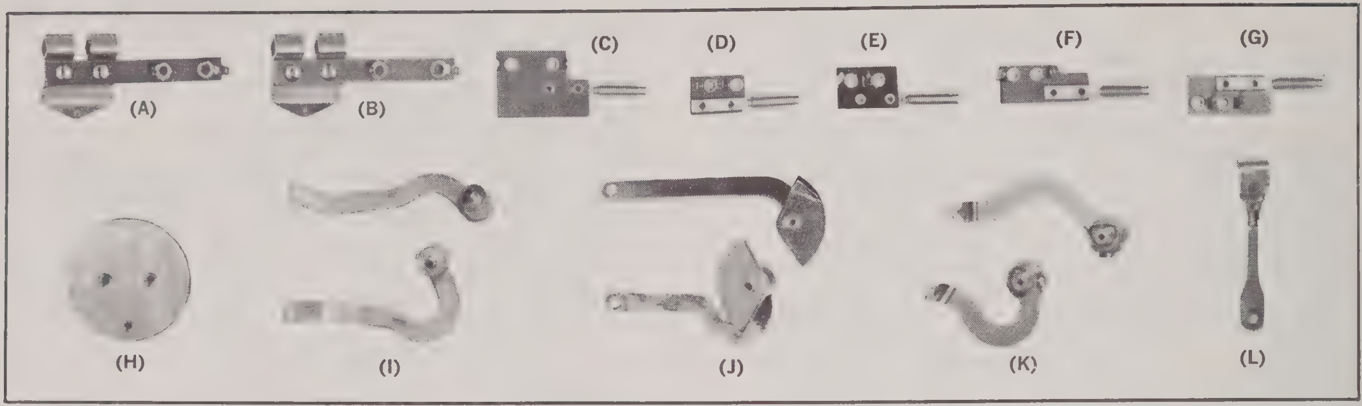


Fig. Z

Socket for speaker pins

PART NO.	DESCRIPTION
9K 81685	.156, Fig. Z.

Coupling Loops, Plate Caps and Shields



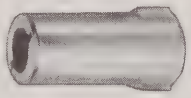
COUPLING LOOP and INSULATORS ASSEMBLIES

Series		Part No.	Fig
"A" Transmitters (30 & 60 Watt)		1-891897	A
"K" Transmitters (TTB1090AA 60 & 100 Watt)		1-859850	B
U43HHT1000A	(25W)	1-863708	C
U43HHT1000B & C	(25W)	1-863717	Sim To E
U43HHT1000D	(25W)	1-80712A87	Not Shown
U43HHT1000E	(25W)	1-80738A25	Not Shown
U53HHT1000A, B & C	(60W)	1-80702A30	F
U63HHT1000A	(80W)	1-80702A22	E
U63HHT1000B & C	(80W)	1-80702A30	F
U41HHT1000A, B, C, D & E	(100W)	1-865483	D
U51HHT1000A, B, C, D & E	(50W)	1-865483	D
U43LHT1000A	(40W)	1-80738A25	Not Shown
U53LHT1000A & B	(60W)	1-80755A67	Sim To F
U63LHT1000A & B	(90W)	1-80755A67	Sim To F
U73LHT1000A & B	(110W)	1-80755A67	Sim To F
U41LHT1000A & B	(40W)	1-865483	D
U51LHT1000A & B	60W)	1-865483	D
U71LHT1000A, B & C	(100W)	1-865483	D
U43MHT1000A, B & C	(40W)	1-80738A25	Not Shown
U53MHT1000A & B	(60W)	1-80755A67	Sim To F
U63MHT1000A & B	(90W)	1-80755A67	Sim To F
U73MHT1000A & B	(110W)	1-80755A67	Sim To F
All Low Band Motran Radios		1-80744A50	G

PLATE CAP ASSEMBLIES

FIG.	DESCRIPTION	PART NO.
H	Platecap for 5894 Tube—25-54MC	58A82663A01
	Set screw for above	3S9724 (2REQ.)
I	Platecap & Strap Assembly for the 5894 Tube when the tube is operated in a push-pull circuit—144-174MC Base Stations & Mobiles except "Motrac" Radio	1V 866959
J	Same as above except for "Motrac" Radio	1V 866960
K	Platecap & Strap for the 829B tube	1V 866961
L	Platecap for 6146 Tube	1V 835384

TUBE SHIELDS



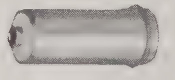
PART NO.	SIZE	USAGE
26-823383	2⅜"	Tube Type—5763
26K859210	1½"	Tube Type—7059
26K859640	2⅜"	Tube Type—7054, 7056
26A881244	1¹⁵⁄₁₆"	Tube Type—12AT7, 12AU7
26A890035	1⅜"	Tube Type—6AK5
26A890034	1¾"	Tube Type—6BH6, 6AK6

150-174 mc HEAT DISSIPATORS

For use with 60, 90 and 110 watt units. Two Heat Dissipators and two set screws required per tube. Set screws not included.

PART NO.	DESCRIPTION
26B83259B01	Heat Dissipator
3A83005E01	Set Screw

COIL SHIELDS

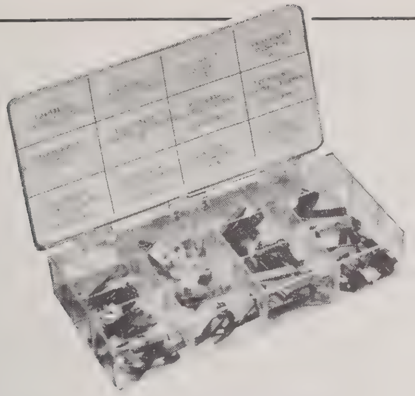


PART NO.	SIZE	USAGE
26A86869	1-7/32 x 11/16"	"Dispatcher" or "Uni-Channel", Rec. $
26A824295	1-3/4 x 11/16"	"Monitor", Rec. (LO3-F)
26A834766	1-55/64 x 11/16"	"G Line", Rec. (TA-140)
26A842219	2-9/16 x 7/8"	Receiver (450-470MC TA-141-A)
26A811222	2-17/64 x 31/32"	Transmitter, "Uni-Channel"
26A834784	1-7/8 x 7/8"	Receiver (450-470MC TA-141-A)
26K858720	2-7/32 x 7/8"	Unified Chassis (450-470MC) (U44BBT)

TUBE SHIELD BASE

PART NO.	SIZE	USAGE
26A890012	1⅛" x ⅞" x ¾"	Fits 26A890034 and 26A890035 Tube Shields

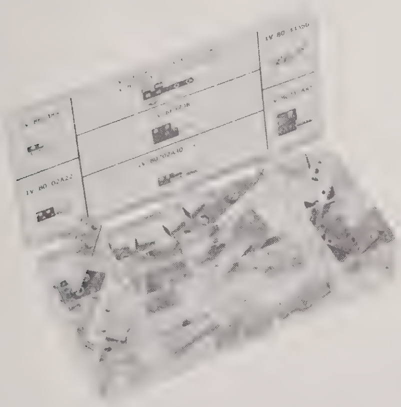
Unique Parts Assortments



PDK-426 CRYSTAL AND CHANNEL ELEMENT HOLD DOWN KIT, contains most used clips for "Motrac"-"Motran," solid state base stations, tube type mobiles and tube type base stations. An ideal kit for refurbishing used equipment to give it that new maintained look. Kit contains 106 pieces.

The crystal and channel element hold down kit contains;

QTY.	PART NO.	DESCRIPTION
10	42A891078	Crystal Holder Clamp
20	41A850841	Crystal Holder Clamp
2	7B83797C01	Hold-Down Bracket
10	42A83920C01	Hold-Down Clamp
20	42-83198H01	Hold-Down Clamp
3	1V80781A95	Channel Element Clip
3	1V80769A39	Channel Element Clip (insulated)
5	1V80700B96	Channel Element Clip (insulated)
2	42-84439A01 (Replaces 1V80784A97)	Channel Element Clip (insulated)
1	1V80784A98	Channel Element Clip (insulated)
10	41A859028	Hold-Down Spring
20	41A82114E01	Hold-Down Spring



PDK-116 INSULATED COUPLING LOOP ASSEMBLIES, are used in most "Motrac"-"Motran" and solid state base stations as well as in tube type "A" and "K" transmitters. A coupling loop insulator assembly kit is available in maintaining the above mentioned equipment. Kit contains 20 pieces.

Kit PDK-116 contains:

QTY.	PART NO.	DESCRIPTION
3	1-865483	Coupling Loop Assembly
3	1-80702A22	Coupling Loop Assembly
1	1-891897	Coupling Loop Assembly
1	1-859850	Coupling Loop Assembly
3	1-863708	Coupling Loop Assembly
2	1-80702A30	Coupling Loop Assembly
3	1-80744A50	Coupling Loop Assembly
3	1-80716A27	Coupling Loop Assembly
1	1-80755A67	Coupling Loop Assembly

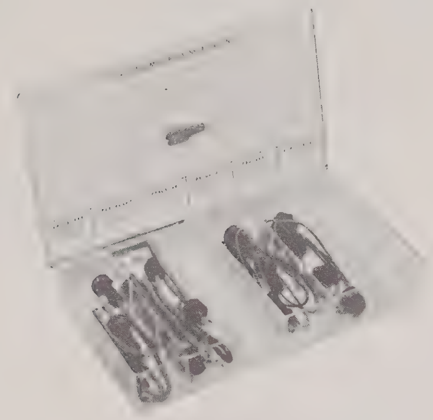
PDK-371 INSULATED GROMMET KIT, includes most of the commonly used Grommets in the two-way line. Most are not referenced in the manuals or shown anywhere in the Buyer's Guide. A Grommet Kit is invaluable in installations and construction projects. Kit contains 441 pieces.

The insulated grommet kit includes

QTY.	PART NO.	DESCRIPTION
50	37K85556	Grommet ⅛"I.D.5⁄16"O.D. For ¼" Hole
25	37K482424	Grommet 3⁄16"I.D.⅝"O.D. For 13⁄32" Hole
20	37-82633B02	Grommet 5⁄32"I.D.¾"O.D. For 9⁄16" Hole
25	37-12706	Grommet ⅜"I.D.11⁄16"O.D. For ½" Hole
4	37K857966	Grommet 15⁄16"I.D.2"O.D. For 1⅝" Hole
4	37K891401	Grommet 1"I.D.1¾"O.D. For 1⅜" Hole
25	37K101643	Grommet 9⁄16"I.D.⅞"O.D. For ¾" Hole
10	37K107997	Grommet ⅝"I.D.1⅛"O.D. For ¾" Hole
8	37K103890	Grommet ¾"I.D.1⅜"O.D. For 1-1/6" Hole
10	37K81057	Grommet ½"I.D.1"O.D. For ¾" Hole
25	37K109120	Grommet 3⁄16"I.D.13⁄32"O.D. For 9⁄32" Hole
25	37K109099	Grommet 5⁄32"I.D.15⁄32"O.D. For 5⁄16" Hole
50	37K16754	Grommet ¼"I.D.½"O.D. For 11⁄32" Hole
50	37K106352	Grommet 5⁄16"I.D.9⁄16"O.D. For 7⁄16" Hole
50	37K107234	Grommet ⅜"I.D.⅝"O.D. For ½" Hole
25	37K18023	Grommet ⅜"I.D.13⁄16"O.D. For ½" Hole
10	37K806001	Grommet ⅜"I.D.1¼"O.D. For 1" Hole
25	37K83159	Grommet 7⁄16"I.D.9⁄16"O.D. For 9⁄16" Hole

PDK-141 CERAMIC INSULATOR REPLACEMENT KIT includes the most used insulators in Motorola base and mobile equipment. Most items are unique to the Motorola Line and are not available elsewhere. Kit contains 63 pieces.

Unique Parts Assortments



PDK-1116 CLIP-ON FUSE KIT.
DON'T REWIRE . . . just because part of the in-line fuse has deteriorated, and you haven't enough slack. The PDK-1116 provides you with a quick, easy method of replacing in-line fuse holders. The fuse bodies and caps have 9″ leads with crimp splices on the leads. Straps are included for tieing back hanging slack. Just remove the faulty part, strip off ¼″ of insulation, and crimp on the new assembly. Each PDK1116 Clip-On Fuse Kit consists of:

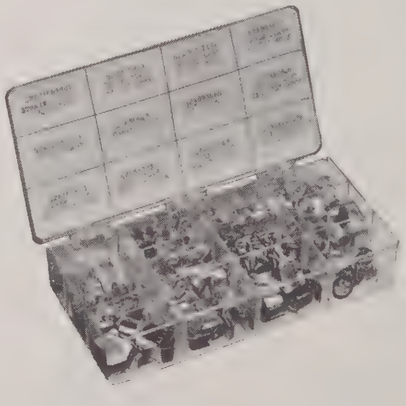
Quantity	Description	Part Number
5	Heavy Fuse Body and Lead	1P84066A68
5	Heavy Fuse Cap and Lead	1P84066A69
5	Light Fuse Body and Lead	1P84066A70
5	Light Fuse Cap and Lead	1P84066A71
6	Panduit Straps	42P84066A60

PDK-425 INSULATED CLAMP KIT, includes rubber dipped metal clamps, chassis feed-thru cable clamps, plastic clamps and insulated feed-thru bushings ideal for fire wall applications. A time and money saver for those new installations. Kit contains 235 pieces.

PDK-7511 RUBBER BUMPER AND FOOT KIT, contains most protective items required to replace worn out bumpers and feet on desk type equipment. One refinishing job on a damaged desk will cost more than the price of the kit. Kit contains 294 pieces.

This bumper and foot kit contains the following items:

Qty.	Part No.	Description
20	75A864052	Bumper
20	75B83620G01	Foot
10	37P835151D65	Foot
10	37P872369	Bumper
50	75C838826	Bumper
20	75C66381A01	Bumper
30	75C82089C01	Bumper
20	75C82554A01	Bumper
20	75P83151D75	Bumper
10	5K892414	Bumper
20	5A812634	Bumper
20	37A87224	Bumper
10	37A482052	Bumper
4	37P83193A16	Bumper
10	75A82566B01	Bumper
20	5K811898	Bumper



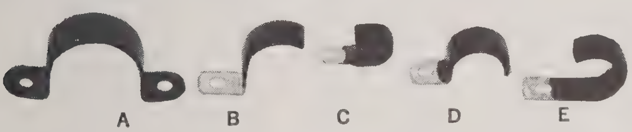
PDK-427 MIKE AND CONTROL CABLE CLAMP, contains most clamps required to secure mike and control cables to handsets and control heads. This is an ideal kit for re-installation and mike repair. Kit contains 210 pieces.

INSULATED AND RUBBER COVERED CABLE CLAMPS

PLASTIC CABLE HOLD-DOWN CLAMPS WITH SINGLE HOLE MOUNTING

PART NO.	FOR CABLE SIZE
42A82143C03	1/8"
42A82143C01	3/16"
42A82143C02	1/4"
42K861179	5/16"
42B859067	1/2"
42A82143C04	9/16"
42K868498	1"

METAL RUBBER CLAD CABLE CLAMPS

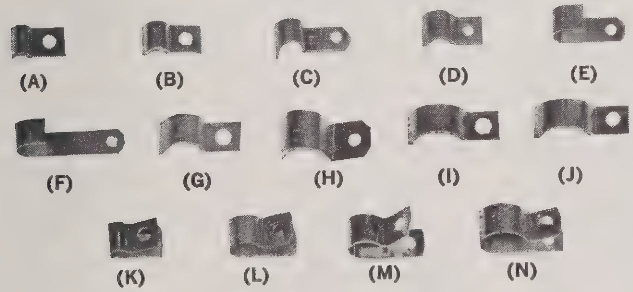


PART NO.	FIG.	OPENING DIMENSION
42A881156	C	1/4"
42A80273	A	5/8"
42A82130D02*	A	5/8"
42A84179	B	5/8"
42A861093	D	3/4"
42A845027	E	1"

*Same as 42A80273 except 1/2" wide and has a 1/4" hole.

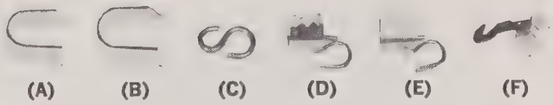
INSULATED FEED THROUGH CABLE CLAMPS

PART NO.	FOR WIRE SIZE	MOUNTING HOLE
42B850861	.25	.50
42K850862	.325	.656
42K850925	.19 x .39	.56 x .73
42B82018H01	.340	.57 x .625
42B82018H02	.405	.670 x .750
42B82018H03	.560	.840 x .875
42B82018H04	.405	.815 x .875



CABLE CLAMPS

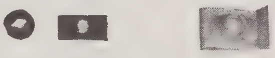
PART NUMBER	I.D.	FIG.
42S 76724	1/8	A
42K 482545	1/4	B
42A 82279E01	1/4	C
42S 22634	9/32	D
42S 13135	5/16	E
42S 10452	5/16	F
42K 86685	3/8	G
42A 891310	1/2	H
42K 83409	19/32	I
42A 16152	21/32	J
42A 82594B01	3/16 open	K
42K 475834	5/16 open	L
42K 802007	13/32 open	M
42A 475257	17/32 open	N



CABLE CLAMPS and "S" HOOKS FOR CONTROL CABLES, HANDSETS, ETC.

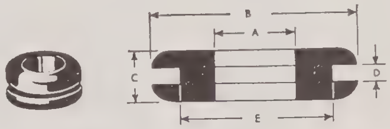
PART NUMBER	CABLE SIZE	FIG.
42A 858681	3/8 less S hook	A
42A 893468	7/16 less S hook	B
42A 893464	S hook for above	C
42A 893647	3/16 with S hook	D
42K 801273	1/4 with S hook	E
42A 82782A01	7/32	F

SPEED NUTS



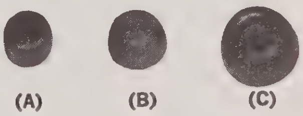
PART NUMBER	SCREW SIZE & DESCRIPTION
2S 115419	3/64 Rect.
2S 7087	3/32 Rect.
2S 7053	1/8 Rect.
2K 851931	1/16 Rect.
2K 835357	1/8 Rnd.
2K 850924	1/8 Rect.
2C 82360B04	#8 Rect.
2C 82360B03	3/16 Rect.
2K 859475	5/16 Rect.
2C 82360B06	1/4 Slip-On Type
2C 82360B07	#14 Slip-On Type

FLEXIBLE RUBBER GROMMETS



PART NO.	HOLE SIZE (A)	O.D. (B)	THICK-NESS (C)	SLOT (D)	MTG. WIDTH (E)
37K 16754	1/4	1/2	5/32	1/32	11/32
37K 106352	5/16	9/16	3/16	1/16	7/16
37K 107234	3/8	5/8	1/4	1/16	1/2
37K 18023	3/8	13/16	3/8	1/16	1/2
37K 806001	3/8	1-1/4	1/4	1/16	1
37K 83159	7/16	3/4	1/4	1/16	9/16
37K 101643	9/16	7/8	15/64	1/16	3/4
37K 107997	5/8	1-1/8	5/16	1/16	7/8
37K 103890	3/4	1-3/8	3/8	1/16	1-1/16
37K 891401	1	1-3/4	7/16	1/16	1-3/8

RUBBER BUMPERS



PART NUMBER	FIGURE
37A 87224	A
37A 482052*	B
75A 864052	C

*molded with screw

RUBBER SLEEVES

PART NO.	I.D.	LENGTH
37K 61346	3/16	1-1/4
37K 61347	1/4	1-1/4
37K 61348	1/8	5/8
37K 50637	1/2	1-1/4
37K 50638	5/16	1-1/4
37K 50639	5/32	1
37K 847035	3/32	5/8

Hardware

HARDWARE ASSORTMENT

Contains 50 tubes of standard 4-40, 6-32, 8-32 and 10-32 slotted binder head machine screws. Sizes range from ¼″ to 1 inch. All have matching nuts, lockwashers, flat-washers and split washers. This generous assortment is rounded off with a selection of the most frequently used "specials" such as sleeves, rivets and speaker terminal pins. A sturdy, metal rack is included free with the complete assortment. All the contents of this assortment are listed in the chart below.

- 50 Tubes of most commonly used hardware for 2-way radio servicing
- In clear plastic tubes
- Identified for ease of stock inventorying, reordering and selection
- On sturdy metal rack finished in hammerloid blue
- Easily mounted on a wall
- For service trucks as well as shops

Order PDK-11A Hardware Assortment
Order ST-103 Rack only
Order ST-130 Empty Tubes

PART NO.	DESCRIPTION	APPROXIMATE NUMBER IN TUBE
	#4-40 SCREWS, WASHERS AND NUT	
3S 8022	4-40 x ¼″ Slt. Bin Machine Screw	75
3S 1930	4-40 x ⅜″ Slt. Bin Machine Screw	75
3S 1452	4-40 x ½″ Slt. Bin Machine Screw	50
3S 1437	4-40 x ⅝″ Slt. Bin Machine Screw	50
3S 2260	4-40 x ¾″ Slt. Bin Machine Screw	40
3S 114832	4.40 x 1″ Slt. Bin Machine Screw	30
4S 7683	#4 Internal Lockwasher	100
4S 114583	#4 Split Lockwasher	100
2S 7019	4-40 x ¼ x 3⁄32 Hex Nut	50
4S 7607	9⁄32 x ⅛ x .027 Flatwasher	100
	#6-32 SCREWS, WASHERS AND NUT	
3S 7164	6-32 x ¼″ Slt. Bin Machine Screw	65
3S 7229	6-32 x ⅜″ Slt. Bin Machine Screw	50
3S 7362	6-32 x ½″ Slt. Bin Machine Screw	50
3S 7342	6-32 x ⅝″ Slt. Bin Machine Screw	40
3S 7346	6-32 x ¾″ Slt. Bin Machine Screw	30
3S 7363	6-32 x 1″ Slt. Bin Machine Screw	25
4S 7650	#6 Internal Lockwasher	100
4S 7669	#6 Split Lockwasher	100
2S 7005	6-32 x ¼ x 3⁄32 Hex Nut	50
4S 1720	⅜ x .156 x .030 Flatwasher	100
	#8-32 SCREWS, WASHERS AND NUT	
3S 7154	8-32 x ¼″ Slt. Bin Machine Screw	50
3S 9661	8-32 x ⅜″ Slt. Bin Machine Screw	50
3S 7258	8-32 x ½″ Slt. Bin Machine Screw	40
3S 7279	8-32 x ⅝″ Slt. Bin Machine Screw	30
3S 7365	8-32 x ¾″ Slt. Bin Machine Screw	25
3S 115341	8-32 x 1″ Slt. Bin Machine Screw	20
4S 7651	#8 Internal Lockwasher	100
4S 7671	#8 Med. Split Lockwasher	100
2S 7003	8-32 x 5⁄16 x ⅛ Hex Nut	50
4S 7562	7⁄16 x .187 x .033 Flatwasher	50
	# 10-32 SCREWS, WASHERS AND NUT	
3S 121768	10-32 x ¼″ Slt. Bin Machine Screw	40
3S 6963	10-32 x ⅜″ Slt. Bin Machine Screw	50
3S 1209	10-32 x ½″ Slt. Bin Machine Screw	30
3S 6946	10-32 x ⅝″ Slt. Bin Machine Screw	25
3S 7385	10-32 x ¾″ Slt. Bin Machine Screw	20
3S 118030	10-32 x 1″ Slt. Bin Machine Screw	15
4S 7658	#10 Internal Lockwasher	100
4S 7673	#10 Split Lockwasher	75
2S 7048	10-32 x 5⁄16 x ⅛ Hex Nut	50
4S 1712	7⁄16 x 13⁄64 x .033 Flatwasher	50
	MISCELLANEOUS HARDWARE	
3S 122897	4-40 x ¼″ Pln. Hex Lockscrew	35
3S 122080	6-32 x ¼″ Pln. Hex Lockscrew	25
3S 129281	6-32 x 5⁄16″ Phl. Rnd. Stl. Pol. Chr. Lockscrew	25
3S 2941	6-32 x ¼″ Phl. Rnd. Stl. Pol. Chr. Machine Screw	25
3S 124183	#8 x 1″ Pin. Hex Tapping Screw	15
3S 8101	#8 x ½″ Stl. Pan Hd. Tapping Screw	40
37K 61348	3⁄16 x ⅛ x ⅝ Neoprene Sleeve	30
PDK 51	Assorted Rivets	100
29-82072D01	.125 Black Terminal Pin	6
29-82072D02	.125 White Terminal Pin	6

HARDWARE IN TUBES AND BOXES OF 500

MACHINE SCREW — STEEL-CAD (SLOTTED BINDER HEAD)

Part No.	Body Size TPI	Length	Approx. Qty. In Tube	For Box/500 Order
3S 1911	2-56	¼	30	PK 268
3S 1578	2-56	⁵⁄₁₆	30	PK 269
3S 1960	2-56	⅜	30	PK 270
3S 1920	3-48	¼	30	PK 271
3S 114795	3-48	⁵⁄₁₆	30	PK 272
3S 8022	4-40	¼	75	PK 273
3S 1943*	4-40	⁵⁄₁₆	100	PK 274
3S 1930	4-40	⅜	75	PK 275
3S 1452*	4-40	½	50	♦
3S 1437	4-40	⅝	50	PK 277
3S 2260	4-40	¾	40	PK 278
3S 114832	4-40	1	30	♦
3S 7164*	6-32	¼	65	PK 280
3S 7178	6-32	⁵⁄₁₆	50	PK 281
3S 7229*	6-32	⅜	50	PK 282
3S 7362*	6-32	½	50	PK 283
3S 7342	6-32	⅝	40	PK 284
3S 7346	6-32	¾	30	PK 285
3S 7363	6-32	1	25	PK 286
3S 7154	8-32	¼	50	PK 287
3S 7162	8-32	⁵⁄₁₆	50	PK 288
3S 9661*	8-32	⅜	50	PK 289
3S 7258*	8-32	½	40	PK 290
3S 7279	8-32	⅝	30	♦
3S 7365	8-32	¾	25	PK 292
3S 115341	8-32	1	20	♦
3S 121768	10-32	¼	40	♦
3S 7171	10-32	⁵⁄₁₆	40	♦
3S 6963	10-32	⅜	40	PK 296
3S 1209	10-32	½	30	PK 297
3S 6946	10-32	⅝	25	PK 298
3S 7385*	10-32	¾	20	♦
3S 118030	10-32	1	15	♦

INTERNAL LOCKWASHERS — STEEL-CAD

Part No.	Screw Size	Hole Size	O.D.	Approx. Qty. In Tube	For Box/500 Order
4S 8406	# 2	.089-.095	.180	100	PK 301
4S 7683*	# 4	.116-.123	.250	100	PK 302
4S 7650*	# 6	.142-.150	.280	100	PK 303
4S 7651*	# 8	.168-.179	.331	100	PK 304
4S 7658*	#10	.195-.204	.375	100	PK 305
4S 7670*	¼	.256-.267	.472	75	PK 306
4S 7674	⁵⁄₁₆	.320-.332	.600	50	PK 307
4S 7655	⅜	.384-.398	.685	35	PK 308
4S 2640	½	.512-.529	.781	25	♦

EXTERNAL LOCKWASHERS — STEEL-CAD

Part No.	Screw Size	Hole Size	O.D.	Approx. Qty. In Tube	For Box/500 Order
4S 7667	4	.116-.123	.250	100	PK 310
4S 7666	6	.142-.150	.312	100	PK 311
4S 7657*	8	.168-.176	.375	100	PK 312
4S 7652	10	.195-.204	.400	75	PK 313

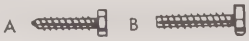
HEX NUTS — STEEL-CAD

Part No.	Thread	Width	Approx. Qty. In Tube	For Box/500 Order
2S 7041	2-56	³⁄₁₆	50	PK 314
2S 8354	3-48	³⁄₁₆	50	PK 315
2S 7019	4-40	¼	50	PK 316
2S 7005	6-32	¼	50	PK 317
2S 7003	8-32	⁵⁄₁₆	50	PK 318
2S 7048	10-32	⁵⁄₁₆	50	♦
2S 7009	10-32	⅜	50	PK 320
2S 2878	¼-20	⁷⁄₁₆ (³⁄₁₆ thk)	25	PK 321
2S 119495	¼-20	⁷⁄₁₆ (⁵⁄₃₂ thk)	15	♦

¼-20 HEX HEAD BOLTS (STEEL CAD)

Part No.	Body Size TPI	Length	Not Available in Boxes or Tubes
3S 122358	¼-20	⅜	—
3S 121856	¼-20	½	—
3S 6990	¼-20	¾	—
3S 9693	¼-20	1	—
3S 7328	¼-20	1¼	—
3S 9694	¼-20	1½	—
3S 114993	¼-20	1¾	—
3S 1845	¼-20	2	—
3S 1844	¼-20	2¼	—
3S 125428	¼-20	2½	—

TAPPING SCREWS — PLAIN HEX



Part No.	Screw Size	Length	Type	Approx. Qty. In Tube	For Box/500 Order
3S 400356	4	¼	B	40	PK 323
3S 3398	6	⅜	B	20	PK 324
3S 3360	6	½	B	20	PK 325
3S 7454	8	¼	B	30	PK 326
3S 7467	8	⅜	B	30	PK 327
3S 7512	8	½	B	30	PK 328
3S 8153	8	¾	A	30	PK 329
3S 7453	8	1	B	20	♦
3S 8176	10	⅜	B	30	PK 331
3S 8188	10	½	B	30	PK 332
3S 7482	10	¾	B	25	PK 333
3S 114056	10	1	A	20	PK 334
3S 8146	10	1¼	A	15	PK 335

FLAT METAL WASHERS — STEEL-CAD

Part No.	Screw Size	Hole Size	O.D.	Approx. Qty. In Tube	For Box/500 Order
4S 7607*	4	⅛	⁹⁄₃₂	100	PK 336
4S 1720*	6	⁵⁄₃₂	⅜	100	PK 337
4S 7562*	8	³⁄₁₆	⁷⁄₁₆	50	PK 338
4S 1706	10	¹³⁄₆₄	⅜	50	♦
4S 1712	10	¹³⁄₆₄	⁷⁄₁₆	50	PK 340
4S 7563	10	¹³⁄₆₄	⅝	40	PK 341
4S 1792	¼	⁹⁄₃₂	⅝	30	♦

SPLIT TYPE LOCKWASHERS

Part No.	Screw Size	Hole Size	O.D.	Approx. Qty. In Tube	For Box/500 Order
4S 114583	4	—	—	100	PK 343
4S 7669	6	—	—	100	PK 344
4S 7671*	8	—	—	100	PK 345
4S 7673*	10	—	—	75	PK 346
4S 400449	¼	—	—	50	PK 347

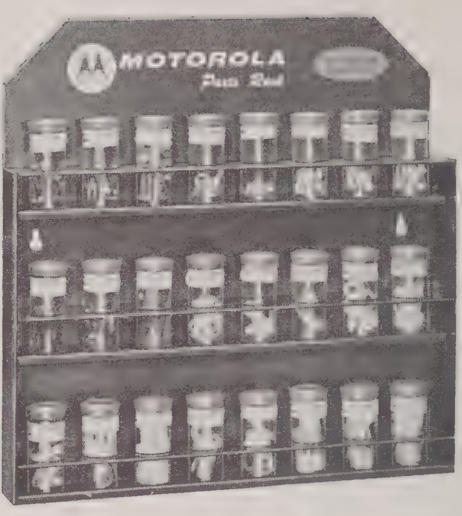
RIVETS — STEEL-POLISHED NICKEL

Part No.	Body Size	Length	Approx. Qty. In Tube	For Box/500 Order
5S 8497	.088	⅛	50	PK 348
5S 7771	.088	³⁄₁₆	50	PK 349
5S 7774	.088	¼	50	PK 350
5S 7759	.088	⁵⁄₁₆	50	PK 351
5S 7706	.122	⅛	50	PK 352
5S 7701	.122	³⁄₁₆	50	♦
5S 7700	.122	¼	50	PK 354
5S 7728	.122	⁵⁄₁₆	50	♦
5S 7791	.122	⅜	50	♦
5S 2839	.122	⁷⁄₁₆	50	♦

* Included in Hardware Rack Assortment
♦Not Available in Boxes of 500

Terminals

SOLDERLESS TERMINALS ASSORTMENT IN FREE METAL RACK

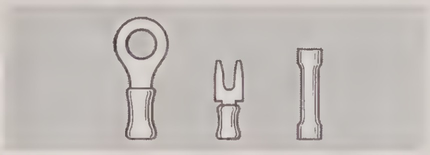


Motorola's line of "API" Terminals has been carefully selected to meet a wide variety of applications involving communications equipment. Solderless Terminals have characteristics which enable them to withstand maximum vibration and feature pull-out strength designed to approach closely the tensile strength of the wire. Complete package includes one tube each of the assortment listed below.

Insulated terminals are conveniently color-coded in red, blue, & yellow to readily identify wire size.

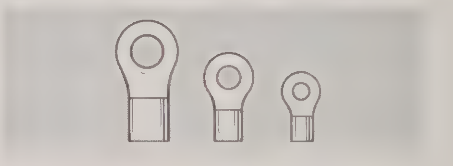
PDK-292 Solderless Terminal Assortment
ST174 Rack Only
ST130 Plastic Vial Only

INSULATED TERMINALS AND SPLICES



WIRE SIZE	STUD SIZE	PART NO.	DESCRIPTION	QTY. IN TUBE
22-16	10	29A 867965	Lug, Ring	20
	5-6	29K 868310	Lug, Spade	20
	—	43K 867962	Splice	20
		Coded	Red	
16-14	10	29K 867966	Lug, Ring	20
	10	29K 867964	Lug, Spade	20
	—	43K 867963	Splice	20
		Coded	Blue	
12-10	10	29K 867967	Lug, Ring	10
	5/16	29K 867968	Lug, Ring	10
	—	43A 857515	Splice	10
		Coded	Yellow	

NON-INSULATED RING TONGUE LUGS



WIRE OR CABLE SIZE	STUD SIZE	PART NO.	QTY. IN TUBE
22-16	5/16	29K 834053	10
16-14	10	29K 832115	10
12-10	10	29K 824154	10
	1/4	29B 824152	10
	5/16	29K 830073	10
	3/8	29K 832116	10
#8	1/4	29K 868311	5
#8	5/16	29K 824454	5
#8	3/8	29K 847817	5
#6	1/4	29K 830075	5
#6	5/16	29K 830074	5
#6	3/8	29K 847816	5
#4	1/4	29K 830076	5
#4	5/16	29K 824153	5
#4	3/8	29K 847815	5

CRIMPING TOOLS

"SUPER CHAMP" CRIMPER

Crimps terminals and strips wire from 22 to 10 gage, shears screws, and bolts up to 3⁄16″ diameter—plastic sleeves on handles are shock and slip proof. ST120 Super Champ*.

PDK-293 12 PAC INSULATED LUG ASSORTMENT

PDK-293 contains 12 of the most commonly used terminal lugs for radio servicing. Its selection of spade, tongue and wire splice lugs meet all standard wire sizes. "Super champ" crimper is also included for simplified bolt and wire cutting and stripping.

PDK-293 Insulated Lug Assortment
PDK-294 Insulated Lug Assortment less Crimping Tool

"CERTI-CRIMP" TOOL

Strong and compact hand tool has a special ratchet feature which prevents the tool from being opened before the crimp is completed; handles are color coded to match terminal insulation. Crimps terminals from 22 to 10 gage. ST124 Certi-Crimp*.

PDK-295 18 PAC NON-INSULATED RING TONGUE ASSORTMENT

PDK-295 a generous assortment of the most commonly used tongue lugs for standard wire sizes. Here is a must assortment for on-the-spot maintenance of cables and other electrical accessories.

PDK-295 Ring Tongue Lug Assortment

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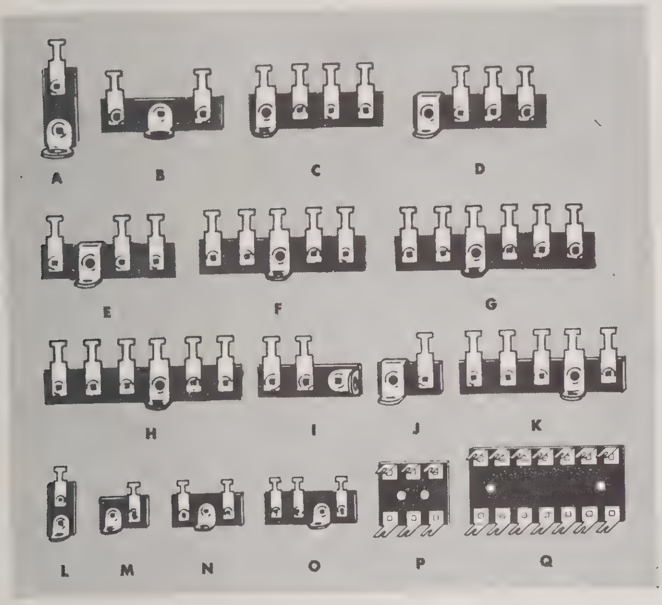
*"Super Champ", "Certi-Crimp", and API are trademarks of Aircraft Marine Products, Inc.

LUG TYPE TERMINAL STRIPS

Single and multiple contact terminal strips, selected for strength, low loss, effective insulation of isolated terminals and overall quality.



Bakelite strips are 1/16″ thick and 3/8″ wide. Solder lugs are spaced on 3/8″ centers.

PART NO.			
(A)	31R 490181	(G)	31R 120963
(B)	31R 124665	(H)	31K 121701
(C)	31K 121702	(I)	31R 119066
(D)	31R 121255	(J)	31R 490140
(E)	31R 121167	(K)	31R 121813
(F)	31R 118964		

Phenolic insulation 1/16″ thick and 5/16″ wide. Solder lugs are spaced on 1/4″ centers.

PART NO.			
(L)	31A 121810	(N)	31B 118476
(M)	31R 119897	(O)	31R 120497

1/4″ lugs spaced on 3/8″ centers.

PART NO.		LUGS	DIMENSIONS
(P)	31A 483523	6	1-1/8 x 1-1/16 x 3/32
(Q)	31A 880813	14	2-5/8 x 1-5/16 x 1/16
(Q)	31A 84849	22	4-1/8 x 1-1/16 x 3/32

PDK-3111 Terminal Strip Assortment

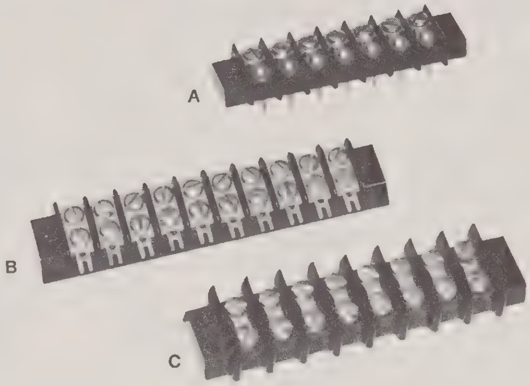
An assortment of 200, 18 sizes of commonly used lug type strips that can be used in a wide variety of electronic applications.

Dark brown bakelite strips are 1/16″ thick and 3/8″ wide. Solder lugs are spaced on 3/8″ centers. Miniature strips included in this kit are 1/16″ thick and 5/16″ wide with solder lugs spaced on 1/4″ centers.

Packaged in a sturdy 18 compartment plastic box with hinged cover. Identification card affixed to inside cover shows photo and part number of each item, making it easier for reordering.

You'll find this kit useful in any Radio shop or Service Van.

BARRIER STRIPS



PART NO.	NO. TERMINALS	WIDTH	LENGTH	FIG.
31-84259C04	3	1⅜	2¾	A
31-84553A67	5	⅞	2½	A
31-84560A28	5	1⅛	3	A
31-84560A59	6	⅞	3	A
31-893733	7	⅞	3 5/16	A
31-84259C05	8	⅞	3¾	A
31-84257C41	10	⅞	4½	A
31-892834	14	1⅛	7⅜	A
31-848888	5	⅞	2½	B
31-82272B04	7	⅞	3¼	B
31-82226C01	10	⅞	4⅜	B
31-880805	12	1⅛	6	B
31-82226C02	14	⅞	5⅞	B
31-848767	2	1⅞	2½	C
31-52465	3	⅞	1⅞	C
31-844593	4	1⅛	2½	C
31-82596E01	5	1 5/16	3¾	C
31-475329	6	1⅛	3⅜	C
31-893249	6	⅞	2⅞	C
31-801266	7	⅞	3¼	C
31-807040	10	⅞	4⅜	C
31-846795	10	1⅛	5⅛	C
31-83393B01	11	⅞	4¾	C
31-848948	13	⅞	5½	C
31-51777	16	1⅜	10½	Sim to C

TERMINAL PINS

29K890401 to 29K890451 terminal pins. Last 2 digits in part number indicate number on pin. 29K802014 terminal pin is a blank. Available in packages of five, not assorted, and as a complete assortment with numbers from 1 to 51 plus a blank. Complete assortment—Order PDK-291.

Optional pins, numbers 52 to 56.

29K835340	#52	**29K847962**	#55
29K847961	#54	**29K847963**	#56

Crimp-On Terminal and Numbered Sleeves

Crimp-on terminals found on newer cable kits for use with numbered sleeves below. These terminals will fit all control heads. **29-82602D01.**

Numbered sleeves for use with 29-82602D01 sleeves above are heat shrinkable (heat gun or soldering iron). The last two digits of the part number correspond to the marking on the sleeve. (e.g. 37-82603D52 is a number 52 sleeve) 37-82603D60 is a blank. **37-82603D01 thru D60.**

Sleeving and Wire Kits

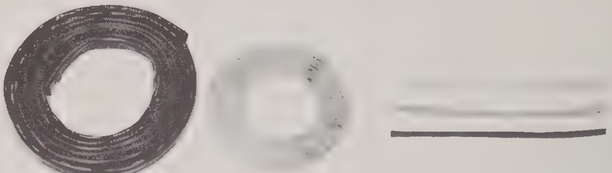
SLEEVING KITS AND "HANDIE-TALKIE" RADIO WIRE KIT

CLEAR TUBING—25-FT. SPOOLS
11M410141 #16
11M400414 #22

PDK1111 Yellow Varnished Sleeving Kit
Kit consists of 120 ft. of sleeving—9′ of #7, 30′ of #10, 30′ of #18 & 51′ of #20

PDK1112 Black Vinyl Sleeving Kit
Kit consists of 141 ft. of sleeving—30′ of #3, 51′ of #8, 30′ of 3/8″ I.D., & 30′ of 7/16″ I.D.

PDK1113 Black Vinyl Sleeving Kit
Kit consists of 75′ of sleeving—25′ of 1/2″ I.D., 25′ of 5/8″ I.D., & 25′ of 3/4″ I.D.



PDK1114 Clear Vinyl Sleeving Kit
Kit consists of 75 ft. of sleeving—25′ of #3, 25′ of #8 & 25′ of 3/8″ I.D.

PDK102 TEFLON WIRE KIT
Contains an assortment of the most often used miniature wires found in pocket receivers, transmitters, etc. Wire supplied is special #26 gauge

COAXIAL CABLE CROSS REFERENCE CHART

RG- /U	MOTOROLA PART NO.	CENT. COND.	DIELEC-TRIC	SHIELD QTY.	JACKET	OVERALL DIAM.	Zo
174	30B840807	Str.	P.E.	1	PVC	.100	50
188	30K868714	Str.	Tef.	1	Teflon	.102	50
188	30B859004	Str.	Tef.	1	Teflon Tape	.110	50
—	30B83794C01	Str.	Tef.	2	Glass Braid	.120	50
122	30A836551	Str.	P.E.	1	PVC	.160	50
303	30B83182A01	Sol.	Tef.	1	Teflon	.170	50
—	30B83062H01	Sol.	Tef.	2	Glass Braid	.187	50
141	30B849372	Sol.	Tef.	1	Glass Braid	.190	50
58A	30K475378	Str.	P.E.	1	PVC	.195	50
—	30B82268E01	Str.	P.E.	1	PVC	.195	50
—	30C82921H01	Str.	Tef.	1	Teflon	.200	50
142B	30C83278B01	Sol.	Tef.	2	Teflon	.200	50
—	30B852190	Str.	Tef.	2	Teflon	.385	50
8	30C82345	Str.	P.E.	1	PVC	.405	52
9	30C84604A01	Str.	P.E.	2	PVC	.420	50
59	30C471240	Sol.	P.E.	1	PVC	.237	73
11	30K50741	Str.	P.E.	1	PVC	.405	75
—	30C82792C01	Sol.	Foam P.E.	1	P.E.	.405	75
—	30C82576H01	Str.	P.E.	Triax	PVC	.285	50
—	30C82793C01	Sol.	P.E.	Triax	P.E.	.475	75

SPEAKER WIRE, LINE CORD

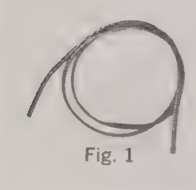


Fig. 1

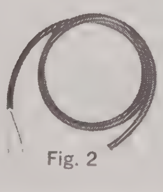


Fig. 2

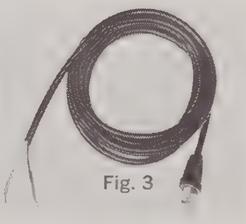


Fig. 3

PART NO. †	FIG.	DESCRIPTION
PK 401	1	Stranded Line Cord 2 Cond. 18 Ga. with Polyvinyl Choride Insulation. (Consists of 100 ft. of 30-8255H01)
PK 402	1	Same as above except has heavier insulation. (Consists of 100 ft. of 30-825430)
PK 389	2	Round type A.C. Line Cord, 2 cond. 18 ga. (Consists of 100 ft. of 30-892533)
30B 892534	3	A.C. Line Cord, 10 ft., 2 conductor with 2 prong plug.
30B 865903	3	A.C. Line Cord, 8 ft., 3 conductor with 3 prong plug.
30B 824772	3	Standard cord w/plug 9 ft.

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†Order all cable under PK number where shown. Available only in standard length indicated.

COAXIAL CABLE

Meets rigid specifications. Low loss polyethylene dielectric. Copper shielded and vinyl outer jacket.

STANDARD LENGTHS OF RG8/U AND RG58A/U

STD. LENGTH	FOR RG8/U (30-475378) ORDER	FOR RG58A/U (30-82345) ORDER
100 ft/bx	PK 358	PK 362
250 ft/rl	PK 359	PK 363
500 ft/rl	PK 360	PK 364
1000 ft/rl	PK 361	PK 365

OTHER CABLE

ORDER NO. †	RG NO.	DESCRIPTION	IMP	LENGTH
PK-609	RG9/U	(30-84604A01)	50	50 ft.
PK 367	11/U	(30K 50741)	75	100 ft.
PK 403	59/U	(30B 471240)	73	100 ft.
PK-610	RG142B/U	(30-83278B01)	50	50 ft.
PK 369	174/U	(30B 840807)	50	100 ft.
PK 370	188/U	(30B 859004)	50	50 ft.

BATTERY CABLE

High quality power cable for replacement of damaged battery-to-fuse block jumpers or relay-to-mobile power cables.

ORDER NO. †	COND. SIZE	COLOR	DESCRIPTION	LENGTH
PK 378	2	Red	(30K 830315)	100 ft.
PK 379	4	Red	(30B 81067)	100 ft.
PK 380	4	Brown	(30K 81068*)	100 ft.
PK 381	6	Red	(30K 812504)	100 ft.
PK 382	6	Black	(30K 825602)	100 ft.
PK 383	8	Red	(30K 812505)	100 ft.
PK 384	10	Red	(30K 813233)	100 ft.
PK 385	10	Black	(30K 831572)	100 ft.
PK 386	12	Black	(30B 858552)	100 ft.
PK 387	12	Red	(30K 858553)	100 ft.
PK 388	14	Red	(30B 82724C01)	100 ft.

* Has black and red tracers.

SHIELDED AUDIO CABLE

#24 stranded inner conductor, vinyl outer jacket. Used in audio circuits of mobile and base station transmitters.

ORDER NO. †	JACKET COVER	DESCRIPTION	LENGTH
PK 371	Blue	(30B 824273)	100 ft.
PK 372	Green	(30K 824274)	
PK 373	Black	(30K 824275)	
PK 374	Red	(30K 824277)	
PK 375	Orange	(30K 824278)	
PK 376	Yellow	(30K 824279)	
PK 377	White	(30K 824280)	

MULTI-CONDUCTOR CABLE

STANDARD CABLE—available from 2 to 8 conductors. Can be used for intercoms, remote desk set hook-ups, etc.

SPECIAL CABLE—12 to 17 conductor for mobile control cable use.

ORDER NO. †	NO. CONDUCT. AND GAUGE	DESCRIPTION	LENGTH
PK 390	4-18 GA.	(*30A 83743)	100 ft.
PK 391	4-20 GA.	(30A 800972)	100 ft.
PK 392	5-18 GA.	(*30A 483756)	100 ft.
PK 393	6-20 GA.	(30B 80203)	100 ft.
PK 394	6 4-22 GA. 2-18 GA.	(*30B 852364)	100 ft.
PK 395	7-20 GA.	(30B 892218)	100 ft.
PK 396	8-20 GA.	(30B 483718)	100 ft.
PK 397	12-22 GA.	(*30B 474498)	50 ft.
PK 398	12 10-24 GA. 2-18 GA.	(30C 830032)	50 ft.
PK 399	13 9-20 GA. 4-18 GA.	(30C 858513)	50 ft.
PK 400	17 13-20 GA. 4-18 GA.	(30C 864650)	50 ft.

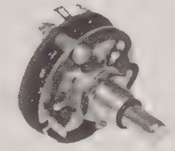
* Non-shielded cable.

Switches

ROTARY SWITCHES

Single and multiple ganged switches specifically designed for communication equipment. All are non-shorting and mount in a ⅜ in. hole (except those indicated by * which mount in a ¼ in. hole).

Type (A)
Miniature

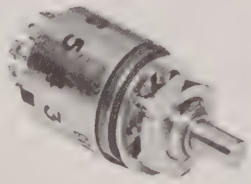


Type (B)
Standard

PART NUMBER	INDEXING	TYPE	POLES	POS. PER POLE	BASE DIA.	SHAFT LENGTH	DEPTH BEHIND PANEL
40-82786H01	30°	B	1	2	1.28	.44	.66
40-82556H01	30°	B	1	3	1.28	.37	.66
40-82078E01	60°	B	1	4	1.31	.44	.54
40-82555D01	30°	B	1	4	1.31	.62	.66
40-82560H01	30°	B	1	5	1.31	.38	.78
40-82091F01	60°	B	1	6	1.25	.43	.75
40-83650E01	36°	A	1	4	1.01	.31	.56
40-84354B01	30°	A	1	6	1.00	1.13	.69
40-82558H01	30°	B	2	2	1.28	.38	.66
40-82843E01*	30°	A	2	2	1.01	.41	.62
40-82851H01	60°	B	2	2	1.30	.76	.75
40-82398C01	30°	A	2	3	1.00	.312	1.25
40-82772G01	60°	B	2	4	1.25	.32	1.49
40-82160H02	30°	A	2	6	1.00	.39	.75
40-82391D02	30°	B	2	6	1.25	.36	.78
40-83161E01	36°	A	2	6	1.00	.50	.63
40-82557F01	30°	B	2	9	1.32	.31	1.00
40-84053B01	30°	A	2	12	1.00	.44	.90
40-83106B01	20°	B	2	18	2.31	.65	1.32
40-83158C01	15°	B	2	24	2.31	.49	1.32
40-82086F01	30°	A	3	3	1.00	.43	.89
40-82268G01	30°	B	3	3	1.44	.49	1.44
40-82891E01*	30°	A	3	4	1.01	.41	.62
40-82144E01	20°	B	3	15	1.25	.50	2.00
40-82341G02	30°	B	4	2	1.44	.90	1.44
40-82843E01	30°	A	4	2	1.01	.41	.62
40-83614G01	45°	A	4	2	1.00	.50	.717
40-82854A01	30°	B	4	4	1.30	.44	1.00
40-82914G01	30°	B	6	2	1.53	.38	.75
40-82268G01	30°	B	6	3	1.44	.90	1.44
40-82699C01	20°	B	6	3	1.69	.38	.81
40-82341G01	30°	B	8	2	1.44	.90	1.44
40-83593A01	30°	B	12	3	1.53	.50	2.00

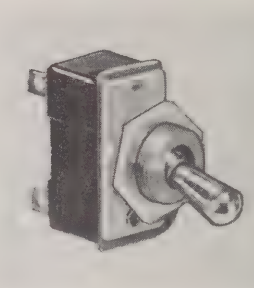
SUB MINIATURE ROTARY SWITCHES

The ideal choice for compact assemblies. All units below have .5 in. diameter bodies and are less than .8 in. deep behind panel. The mtg. bushing is ¼-28. Switches are designed for low current applications.



POLES	POS.	PART NUMBER
1	2	40-82801C01
2	2	40-83471H01
2	3	40-83471H04
2	4	40-84214H03
2	5	40-84214H02

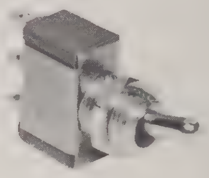
TOGGLE SWITCHES



General purpose AC-DC type switches. Bakelite case. Solder lug terminals (except heavy duty) which has screw terminals. 15/32″ diameter threaded stem. U.L. approved.

PART NUMBER	CIRCUIT & DESCRIPTION	CURRENT @ 250V
40-482097	SPST	3A
40-811825	SPST Weatherproof	3A
40-844445	SPST Momentary	3A
40-858304	SPST	10A
40-80246	SPDT	1A
40-855322	SPDT Momentary	1A
40-859505	SPDT	3A
40-82478G01	SPDT (Center off) Momentary	3A
40-84308A71	SPDT	10A
40-811752	DPST	3A
40-811760	DPST Momentary	3A
40-811748	DPST Heavy Duty	20A
40-80246	DPDT	3A
40-861983	DPDT Weatherproof	3A
40-82877D01	DPDT Momentary	3A
40-82878D01	DPDT 3 Position (Center off)	10A
40-800452	DPDT Momentary	10A
40-835757	3PST	10A
40-82590E01	3PDT 3 Position (Center off)	10A
40-83570C01	3PDT	10A

MINIATURE TOGGLE

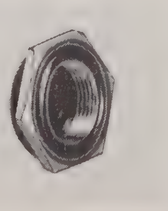


PART NUMBER	CIRCUIT	RESISTIVE LOAD CURRENT/ VOLTAGE	MTG. BUSHING	BODY
40-82090H01	SPDT	5A/28VDC /120VAC	¼-40	.343 dia. x .672 d
40-82089H01	DPDT	5A/28VDC /120VAC	¼-40	.468 dia. x .672 d
40-83933D01	DPDT 3 pos.		15/32-32	.546 l x .546 w x .706 d
40-82085J01	SPDT	.5A/20VAC /DC	¼-40	.50 l x .27 w x .52 d

SWITCH PLATES, TOGGLE TYPE

PART NO.	DESCRIPTION
13K 80910	On-Off Vertical reading

SEAL NUT ASSEMBLY



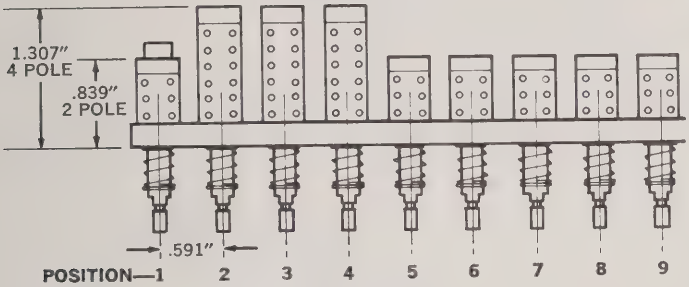
Prevents dust or other foreign matter from entering switch mechanism. Will fit over bat handle type switches.

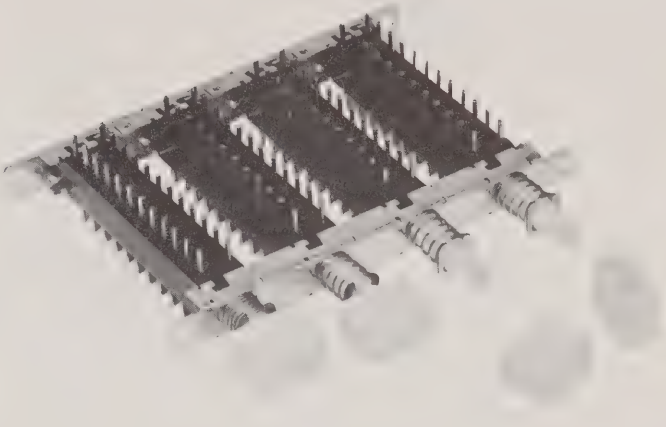
2A 474371 Seal Nut
***2S 82262B01** Seal Nut
*Covers bat handle

MINIATURE PUSHBUTTON SWITCHES

These miniature pushbutton switches feature fully enclosed contact assemblies to protect against intermittents. Their small size make them ideal for mounting directly on printed circuit boards.

BUTTONS for use on switches 38-84321C01 (Pearl)
38-84321C02 (Orange)

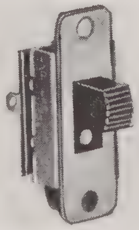




MOTOROLA PART NO.	POSITIONS & FUNCTION								
	1	2	3	4	5	6	7	8	9
40D84324C01	2 POLE P-P*	—	—	—	—	—	—	—	—
40D84324C02	2 POLE M	—	—	—	—	—	—	—	—
40D84324C10	4 POLE P-P	—	—	—	—	—	—	—	—
40D84324C03	2 POLE INTER.	2 POLE INTER.	—	—	—	—	—	—	—
40D84324C04	2 POLE M	2 POLE P-P	2 POLE P-P	—	—	—	—	—	—
40D84324C05	2 POLE P-P	2 POLE P-P	2 POLE P-P	2 POLE P-P	—	—	—	—	—
40D84324C09	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	—	—	—	—	—
40D84324C08	4 POLE INTER.	—	4 POLE INTER.	—	4 POLE INTER.	—	—	—	—
40D84324C06	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	—	—	—	—
40D84324C11	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	—	—	—
40D84324C07	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.	2 POLE INTER.

"P-P" Indicates push-push switch
"M" Indicates momentary switch
"INTER." Indicates interlocking switch with lock-out
*CO1 Switch has lock-out cam

SLIDER SWITCHES



Cadmium plated housing with black phenolic button, solder to lug terminals.

PART NUMBER	CIRCUIT	RATING	SIZE
40-84622B03	SPDT	3A/125V	.530x.880x.590
40-83890A01	DPDT	3A/125V	.531x1.37x.687
40-84308A89	DPTT	3A/125V	.530x1.625x1.01

PUSH BUTTON SWITCHES

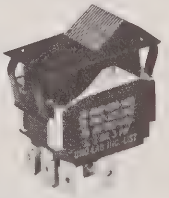
15/32 shank, solder lug terminals.

Red push button—1 9/16 long by 21/32

*Black push button—1 15/16 long by 21/32

PART NO.	ACTION	DESCRIPTION
40A 881084	SPST	(normally open)
*40A 839660	SPST	(normally closed)

ROCKER SWITCHES

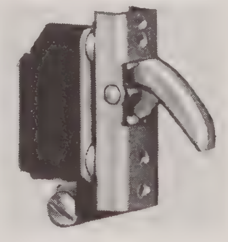


All units have .625 x 1.33 buttons. TLN series mounts in a .82 x 1.45 by means of a snap clip. 40-04733C01 has 1.88 mounting holes for rivets or screws. All are rated at 15 amps at 125 VAC.

PART NUMBER	POLES	POS. 1	CENTER	POS. 3
40-04733C01*	SPST	ON	None	OFF
TLN4385A	DPST	OFF	None	MOM. ON
TLN4383A	DPDT	ON	None	ON
TLN4384A	DPDT	ON	OFF	ON
TLN4386A	3PST	ON	None	OFF

*Unit has built-in 110 volt neon lamp visible through red lens in rocker button (illuminated in ON position).

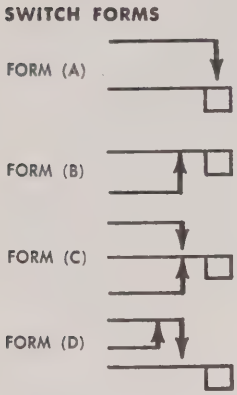
DOOR SWITCHES

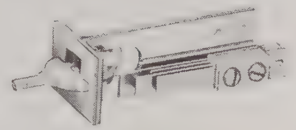


Black bakelite cadmium plated frame with screw type terminals. Spring loaded, normally open.

PART NO.	ACTION	RATING	SIZE
40A 80237	SPST	6 amp 125V	1-13/32 x 5/8

LEVER SWITCHES





PART NO.	CONTACT ASSEM. POS 1	POS. 2	TYPICAL APPLICATION
40K 855061	2 "A" (NL)	—	TK444
40K 855062	1 "C" (L)	2 "B" (L) —	TK557 Supervisory Switch
40K 855063	2 "C" (L)	—	TK444 2 Freq. Switch
40K 855064	3 "B", 1 "A" (NL)	—	TK560 Intercom Switch
40K 855793	1 "A", 1 "C" (L)		TK561 Speaker Mute Switch
40K 857647	2 "B", 1 "A", 1 "C" (NL)	—	TK560 Intercom Switch
40K 824213*	2 "A" (NL)	2 "A" (NL)	P9373
40K 824214*	2 "A" (L)	2 "A" (NL)	P9372

"L" Locking Type. "NL" Non-Locking Type. *With Black Plastic Knob. All Others Less Knob.

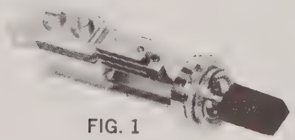


FIG. 1

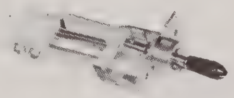


FIG. 2

Open Leaf Lever actuated single hole mount switch used in fixed station equipment. A 15/32″ mounting hole required. (Fig. 1)

PART NO.	POSITION	CONTACTS
40D83303G01	Two Position Locking	1A
40D83303G02	Two Position Locking	1B
40D83303G03	Two Position Non-Locking	2A
40D83303G04	Two Position Non-Locking	2C
40D83303G05	Two Position Locking	2C
40D83303G06	Three Position 1 Locking 2 Non-Locking	2A 2B

KNOBS

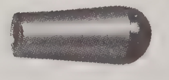


Fig. A

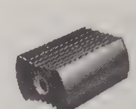
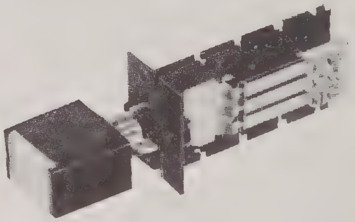


Fig. B

PART NO.	DESCRIPTION
36A 82783C01	Knob (A)
36B 850902	Knob (B)

PUSH BUTTON SWITCHES



Open Leaf, Illuminated Push Button Switches for Use in Fixed Station and Mobile Equipment.

PART NO.	LOCKING	CONTACTS	NO. LAMP SOCKETS
40D83271G01	No	3-A's	Single
40D83271G02	No	2-A's 1-C	Single
40D83271G03	No	2-A's	Single
40D83271G04	No	2-A's 2-B's	Single
40D83271G05	Yes	1-A 2-C's	Single
40D83271G06	Yes	2-A's 1-C	Single
40D83271G07	Yes	2-C	Twin
40D83271G08	Yes	1-A 1-C	Single
40D83271G09	Yes	1-A 3-B's	Single

NOTE: Bulbs not supplied with above. For 6 Volts use 65K861827 or 65-83358H06 for 28 Volts.
38P83043H86 Push Button Assembly For Above Series Switches

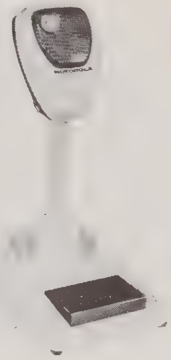
Open Leaf Lever actuated switch used in Base Station and T1370A Series Remote Equipment. A ⅜″ hole and Two mounting holes are required for mounting. (Fig. 2)

PART NO.	POSITION	CONTACTS
40D83334G01	2 Position Locking	1C
40D83334G02	2 Position Non-Locking	1A 2C
40D83334G03	2 Position Non-Locking	1A 1B 1C
40D83334G04	2 Position Non-Locking	1A 1C
36P83043H84	Knob for Above Series Switches	

Switches, Microphone and Handset

HANDSET SWITCHES

FOR MODEL	HANDSET MFG.	SWITCH PART NO.
P278C & F P278G	Roanwell	40X 834349
NU 129	For Stromberg-Carlson Model Handsets	40K 850860
TU 475		
TU 476		
TU 477		
TU 560		
TMN 6005A		
TMN 6006A		
1V 852500		
TMN 6009B		
TMN 6010B		
NMN 6007A		
NMN 6017A		40P 82446G04



BASE STATION MICROPHONE PUSHBUTTONS AND SWITCHES

MODEL	PUSHBUTTON DESC.	PUSHBUTTON PART NO.	SWITCH DESC.	SWITCH PART NO.
TU-532	Large "Xmit"	38-855008	"Xmit" "Mon"	40-83300B01 40-83300B02
TU-533	Small "Xmit"	38-855009		
	"Mon"	38-855010		
TU-535	Large "Xmit"	38-855008		
TU-536	Small "Xmit"	38-855009		
	"Mon"	38-855010		
P7245	Push knob	38-850802	"Xmit"	40-810173
TMN-6007A	Large "Xmit"	38-855008	"Xmit" "Mon"	40-83298B01 40-82424B02
TMN-6008A	Small "Xmit"	38-855009		
	"Mon"	38-855010		
TMN-6041A	Small "Xmit"	38-855009	"Xmit"	40-83298B01
	"Mon"	38-855010	"Mon"	40-83298B02
TMN-6042A	Large "Xmit"	38-855008	"Xmit"	40-83298B01

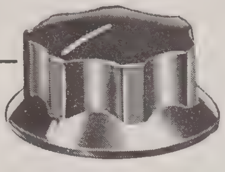
MOTORCYCLE AND PORTABLE MICROPHONE SWITCHES

MODEL	APPLICATION	PART NUMBER
NU 130	"Handie-Talkie" Radio	40K 837081 (Shure) 40K 865087 (Turner)
NMN 6001A	U/O H23NAC	40B 867912
NMN 6003A	Motorcycle	40C 82202B01
NMN 6005A	Motorcycle	40C 82202B01
NMN 6006A	Motorcycle	40C 82202B01
NMN 6008A	"Handie-Talkie" Radio & Pack Set	40C 82663G01
NMN 6010A	Industrial	40C 82202B01
NMN 6011A	Low Freq. Pager	40-83300B02
NMN 6012A	Surveillance Mike	40B 82159D01
NMN 6013A	Low Freq. Pager	40B 83300B02
NMN 6015A	Industrial "Dispatcher" Radio	40C 82263G01
NMN 6018A	P23DDC, etc.	40C 82863E01
NMN 6019A		
NMN 6020A, B		
NMN 6021A		
NMN 6022A, B		
NMN 6023A		
NMN 6024A, B		
NMN 6025A		
NMN 6027A, B		
NMN 6028A, B		
NMN 6026A	Surveillance Mike	40B 82159D01
NMN 6032A	D43DEN	40C 82263G01
NMN 6034A		

MOBILE MICROPHONE SWITCHES

MODEL NO.		SWITCH PART NUMBER
P255 Series		40K 51045
TU 341		
TU 342		
TU 343		
50D 844798		
50B 890923		
TU 354		
50D 845122		40K 852079
TU 351A	DPST or SPST	40K 82202B01 40B 852734
TU 352A		
TU 353A		
1V 852400		
1V 80707A64		
TMN 6011A		
TMN 6013A	DPST	40C 82263G02
TMN 6018A	DPST	40C 82263G01
TMN 6019A	DPST	40C 82263G02
TMN 6020A		40C 82263G02
TMN 6022A		40C 82263G02
TMN 6023A		40C 82263G01
1V 80720A65		40C 82263G02

Knobs and Potentiometer Hardware

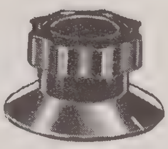

(A)

(B)

(C)

(D)

(E)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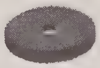
(G)


(H)

(I)

(J)

(K)

(L)

(M)

(N)

(O)

(P)

PART NO.	FIG.	SIZE	DIA. SHAFT	COLOR
36-855070	A	1.125″	.250″	Black
36-844421	A	2.000″	.250″	Black
36-82425B01	B	.875″	.250″	Natural
36-855027	C	.750″	.250″	Dark Gray
36-844653	C	1.000″	.250″	Black
*36-83573H01	D	.360″	.125″	Aluminum w/dot
*36-83573H03	D	.360″	.125″	Aluminum w/line
*36-83573H05	D	.360″	.125″	Aluminum plain
36-82630H01	E	.750″	.250″	Black
36-832199	F	1.500″	.250″	Black
36-80556	G	.50″ x 1.25″	.250″	Black
36-82942C01	H	.750″	.076″	Black
36-82629H04	I	.750″	.250″	Black
36-82869D02	I	.750″	.250″	Metallic Blue
36-82631H03	J	1.250″	.250″	Black
36-82766H04	K	.580″	.125″	Metallic Blue
36-82766H05	K	.580″	.125″	Metallic Blue w/pointer

*Order set screws separately, Part No. 3-83174C02

PART NO.	FIG.	SIZE	DIA. SHAFT	COLOR
36-82628H08	K	.684″	.125″	Black
36-82628H09	K	.684″	.125″	Black w/pointer
36-82628H03	K	.684″	.250″	Black
36-82629H01	K	.750″	.250″	Black
36-82629H02	K	.750″	.250″	Black w/pointer
36-82869D03	K	.750″	.250″	Metallic Blue
36-83085E01	K	1.000″	.250″	Black
36-82632H01	K	1.250″	.250″	Black
36-82632H02	K	1.250″	.250″	Black w/pointer
36-82633H02	K	1.500″	.250″	Black
36-82659D01	L	.500″	.125″	Chrome
36-82681E01	M	.562″	.125″	Chrome w/dot
36-82681E03	M	.562″	.125″	Chrome less dot
36-82783C01	N	.375″	.156″	Black
36-82812E01	O	.687″	.125″	Chrome w/dot
36-82812E03	O	.687″	.125″	Chrome less dot
36-850902	P	.375″ x .625″	.187″	Black

WASHERS, STANDARD

Part No.	Screw Size	Lock
4S7670	¼	Int. Star
4S7691	⅜	Int. Star
4S7698	⅜	Int. Star
4S8424	15/32	Int. Star
4S8210	⅜	Flat

WASHERS, SPECIAL

4A82453E01	¼ Diam.	Teflon
4A82634E03	¼ Diam.	Stainless Steel

Right Angle Allen Wrenches

SCREW SIZE	HEX SIZE	PART NO.
#4	.050	66K106525
#6	1/16	66A106513
#8	5/64	66K21442
#10	3/32	66K106515
#¼	¼	66K108154
#⅜	5/16	66K85988

Allen Wrench Sets

Right Angle Hex Spline Kit	ST260
Screw Driver Type	ST613

NUTS, STANDARD

Part No.	Thread	Thickness	Width	Finish
2S1376	⅜-32	3/32	½ Hex	Cad
2S7011	⅜-32	⅛	9/16 Hex	Cad
2S8364	⅜-32	3/32	½ Hex	Nickel
2S8365	¼-32	3/32	⅜ Hex	Nickel

NUTS, SPECIAL

2S847628	¼-32 Sealnut
2S82653D03	¼-32 Spanner Nut

SET SCREWS

SIZE & TPI	LENGTH	HEX SIZE	PART NO.
4-40	3/16	.050	3S83174C01
6-32	⅛	1/16	3S7115
6-32	¼	1/16	3S9724
8-32	⅛	slotted	3S7108
8-32	¼	5/64	3S9705
8.32	3/16	5/64	3S9717
10-32	3/16	3/32	3S7129
¼-20	⅜	⅛	3S129870

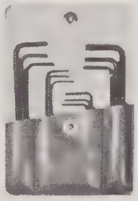
PDK-312 Set Screw Assortment Kit

Why spend valuable service time in fishing through a jumble of spare parts?

Have this convenient kit at your fingers reach when a requirement for a lost or damaged set screw arises.

Here's an assortment of 150 Allen-Head set screws for a variety of applications in the electronic field. This kit provides sizes of 2-56, 4-40, 6-32, 8-32, 10-32 and ¼″ in commonly used lengths. Packaged in a sturdy constructed 12-compartment plastic box with an identification card affixed to the inside cover. Card provides the set screw sizes and Motorola part numbers for easy reordering.

ST-260 Hex and Spline Key Wrench Kit

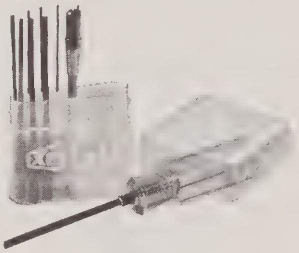


A complete wrench kit for both hex and spline type screws, used in the electronic field. Twelve wrenches enclosed in an attractive leatherette case. Will fit #2 to ⅜″ screws.

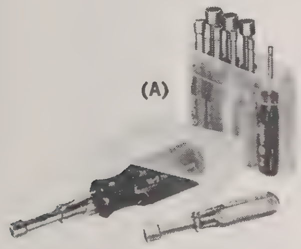
PDK-361 Portable Radio Knob Kit

Nearly 100 knobs, set screws, etc. for all current Motorola portable products in a convenient, 12-section, "see-thru" plastic box. Invaluable when servicing HT, PT, "Dispatcher" and Pocket Receiver radios.

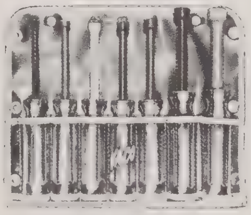
ST-613 Allen Wrench Drive Set



This new set of interchangeable Allen blades is conveniently packaged in a handy plastic storage case and includes 9 different blades, a 4″ extension and a plastic driver handle. Sizes included range from a tiny .050″ to 3/16″.



(A)



(B)

(C)

ST-454 Nut Driver Set (A)

Graded in steps of 32nds of an inch, these drivers speed servicing of miniature equipment. The ten nut drivers are color coded and packed in a plastic case. Extra "slipover" handle provides more grip, reach and turning power.

ST-150 Nut Drive Sets (B)

7 Hex sizes 3/16″ to ½″ with hollow color coded shafts for quick identification.

Pocket Sockets (C)

Four sizes in one tool. To change sizes, simply push one end in and pull other end out until it locks. Reverse procedure for other sizes.

ST-664 Pocket Socket 3/16″, 7/32″, 9/32″ & 11/32″

Shielded Audio Cable

#24 stranded inner conductor, vinyl outer jacket. Used in audio circuits of mobile and base station transmitters. These PK kits available only in 100 ft. lengths.

ORDER NO. †	JACKET COVER	
PK 371	Blue	(30B 824273)
PK 372	Green	(30K 824274)
PK 373	Black	(30K 824275)
PK 374	Red	(30K 824277)
PK 375	Orange	(30K 824278)
PK 376	Yellow	(30K 824279)
PK 377	White	(30K 824280)

†Order all cable under PK number where shown.

WIRE WOUND POTENTIOMETERS, WITH SWITCH

(Bushing Size ⅜-32)

POWER RATINGS

All rated 2 watts except 18C 82347G01 (1 watt)

RESIS.	TAPER	LENGTH	SHAFT DIA.	TYPE	THREAD LENGTH	DIA. BODY	PART NUMBER
15*	CTS "C"	½	¼	flatted	7/16	1⅛″	18D 82034E01
20	10% CW	½	¼	flatted	⅜	1¼″	18K 861676
20	10% CW	½	¼	flatted	¼	1¼″	18K 838283
20	CTS "C"	½	¼	flatted	¼	1¼″	18C 82528D01
20	CTS "C"	½	¼	flatted	7/16	1¼″	18C 82528D02
20	CTS "C"	1	¼	flatted	7/16	1¼″	18C 82528D03
20	CTS "C"	1	¼	flatted	7/16	1¼″	18-82528D04 (DPST)
20	linear	⅜	¼	flatted	¼	1¼″	18K 824982
30	linear	½	¼	flatted	¼	1¼″	18A 482331
100	linear	½	¼	flatted	¼	1⅝″	18C 82788E01
350*	5% CW	1	¼	flatted	¼	1¼″	18C 82347G01
1K	linear	½	¼	flatted	¼	15/16″	18D 82810C06
25K	10% CW	½	¼	flatted	7/16	15/16″	18D 82810C04
25K	10% CW	1	¼	flatted	7/16	15/16″	18D 82810C07
25K*	10% CW	½	¼	flatted	¼	15/16″	18K 868896
50K*	linear	½	¼	flatted	7/16	15/16″	18D 82810C03
500K*	"S"	½	¼	flatted	7/16	15/16″	18D 82810C02
500K	linear	½	¼	flatted	¼	1/16″	18A 822301

Potentiometers listed in this section have one switch. Those indicated by an asterisk (*) have 2 switches.

Potentiometers

LINEAR TAPER indicates even resistance with rotation of shaft. "%" TAPER is percent of total resistance at 50% of rotation. (Recommended for audio use.)

STANDARD CARBON POTENTIOMETERS

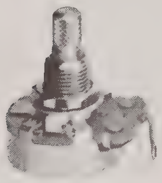
(Bushing Size ⅜-32, Body Dia. 1″)

POWER RATINGS

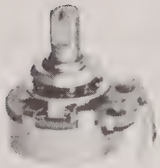
up to 10K ohms
Linear type=0.50 watt
Taper type=0.25 watt

10K to 100K ohms
Linear type=0.33 watt
Taper type=0.16 watt

over 100K ohms
Linear type=0.25 watt
Taper type=0.12 watt



(A)



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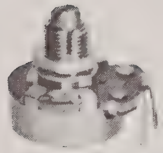


(C)

(D)

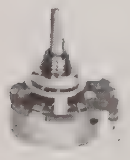
"CCW" indicates counter clockwise rotation

"CW" indicates clockwise rotation

		SHAFT				THREAD	
RESIS.	TAPER	LENGTH	DIA.	TYPE	FIG.	LENGTH	PART NUMBER
100Ω	linear	7/16	¼	flatted	B	¼	18D 82700D08
500	linear	⅜	¼	flatted & slotted	B	¼	18– 801878
750	linear	⅜	¼	flatted	B	¼	18D 82515B40
1K	linear	7/16	¼	round	B	¼	18D 82515B01
1K	linear	⅛	¼	slotted	C	⅜	18D 82515B42
1.5K	linear	⅜	¼	slotted	C	⅜	18D 82515B10
2K	linear	½	¼	flatted	B	7/16	18D 82515B04
2K	linear	¼	¼	slotted	C	¼	18D 82515B32
2K	linear	3/16	¼	slotted	C	⅜	18K 800630
2K	10% CCW	½	¼	flatted	B	⅜	18K 859321
2K	2% CW	3/16	¼	slotted	C	¼	18K 876358
2.5K	linear	⅜	¼	round	B	¼	18K 858468
5K	linear	⅜	¼	round	C	¼	18D 82700D01
5K	linear	3/16	¼	slotted	B	¼	18D 82700D03
5K	5% CW	⅝	¼	flatted	B	¼	18D 82515B24
5K	5% CW	⅜	¼	slotted	C	¼	18D 82515B25
5K	linear	¼	¼	slotted	C	⅜	18D 82515B26
5K	10% CW	1 11/16	¼	flatted & slotted	B	¼	18– 851933
5K	linear	⅛	¼	slotted	C	¼	18D 82515B35
5K	linear	⅜	¼	flatted	B	¼	18D 82515B37
5K	linear	15/32	¼	flatted	B	⅜	18D 82515B43
5K	linear	Recessed	—	slotted	D	¼	18D 82700D10
10K	linear	⅜	¼	flatted 30°	B	¼	18D 82515B02
10K	linear	⅜	¼	flatted 130°	B	¼	18D 82515B03
10K	10% CW	⅜	¼	flatted	B	13/32	18D 82515B33
10K	10% CW	⅜	¼	flatted & slotted	B	¼	18K 805241
10K	10% CW	3/16	¼	slotted	C	¼	18K 876356
10K	linear	3/16	¼	slotted	C	¼	18K 876357
10K	linear	⅛	¼	slotted	C	⅜	18D 82515B41
10K	5% CW	⅜	¼	flatted	B	¼	18D 82700D06
25K	10% CW	½	¼	flatted	B	¼	18D 82515B27
25K	linear	⅛	¼	slotted	C	⅜	18D 82515B28
25K	10% CW	½	¼	flatted	B	¼	18K 857698
25K	10% CW	½	¼	flatted	B	¼	18K 857840
25K	linear	15/32	¼	flatted	B	⅜	18D 82515B44
25K	10% CW	½	¼	flatted	B	7/16	18D 82700D04
25K	10% CW	1.00	¼	flatted	B	7/16	18D 82700D07
30K	10% CCW	5/16	¼	flatted	B	¼	18D 82515B14
50K	linear	⅜	¼	flatted	B	¼	18D 82515B07
50K	linear	⅜	¼	knurled	A	⅜	18D 82515B09
50K	linear	⅜	¼	flatted	B	¼	18D 82515B21
50K	10% CW	⅜	¼	flatted & slotted	B	¼	18K 803437
50K	10% CCW	⅜	¼	round	B	¼	18K 858469
100K	10% CW	½	¼	slotted	B	¼	18– 840726
100K	2% CW	½	¼	flatted & slotted	B	¼	18K 857095
100K	linear	⅜	¼	flatted	B	¼	18D 82515B39
200K	linear	⅜	¼	flatted 120°	B	¼	18D 82515B05
200K	10% CW	½	¼	slotted	C	¼	18K 845110
250K	linear	5/16	¼	flatted	B	¼	18D 82515B12
300K	2% CW	3/16	¼	slotted	C	¼	18K 812998
300K	linear	3/16	¼	slotted	C	⅜	18K 892291
500K	10% CW	½	¼	flatted & slotted	B	¼	18– 86865
500K	linear	½	¼	flatted	B	¼	18A 822378
500K	10% CW	½	¼	flatted	B	⅜	18K 859320
500K	2% CW	3/16	¼	slotted	C	⅜	18K 893205
1 MEG	linear	⅜	¼	flatted 120°	B	¼	18D 82515B06
1 MEG	linear	⅜	¼	flatted	B	¼	18D 82515B20
1 MEG w/switch	2% CW	3/16	¼	slotted	B	¼	18K 483727
1 MEG	linear	3/16	¼	slotted	C	⅜	18K 800631
1 MEG	2% CW	½	¼	flatted & slotted	B	¼	18K 891109
1 MEG	linear	Recessed	—	slotted	D	¼	18D 82700D11
2 MEG	linear	Recessed	—	slotted	D	¼	18D 82700D02
5 MEG	linear	⅜	¼	knurled	A	⅜	18D 82515B08
5 MEG	20% CW	5/16	¼	flatted	B	¼	18D 82515B13

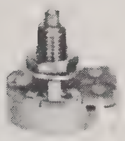
MINIATURE CARBON POTENTIOMETERS

(Bushing Size ¼-32)



(E)

		SHAFT				LENGTH	DIA.	
RESIS.	TAPER	LENGTH	DIA.	TYPE	FIG.	THREAD	BODY	PART NUMBER
200	linear	⅛	⅛	slotted	F	¼	¾	18K 865774
250	linear	¼	⅛	flatted	E	⅛	⅝	18C 4220B01
250	linear	⅝	5/32	flatted	E	¼	⅝	18 4465A01
500	linear	⅛	⅛	slotted	F	¼	¾	18D 82072C08
2K	linear	⅛	⅛	slotted	F	¼	⅝	18C 82816E03
1K	linear	⅛	⅛	slotted	F	¼	¾	18D 82072C07
2K	10% CCW	⅜	⅛	flatted	E	¼	¾	18K 847061
2K	2% CW	⅜	⅛	flatted	E	¼	¾	18K 867227
5K	5% CCW	3/16	⅛	flatted	E	¼	⅝	18C 82816E01
5K	linear	½	⅛	round	E	3/16	⅝	18C 82017F01
5K	linear	¼	⅛	flatted	E	3/16	⅝	18C 82661D01
10K	5% CCW	3/16	⅛	flatted	E	⅜	⅝	18C 82816E02
10K	special	¼	⅛	flatted	E	⅛	⅝	18C 04220B02
10K w/switch	10% CW	¼	⅛	flatted	E	3/16	⅝	18C 82662D01


(F)

POWER RATINGS

up to 10K ohms
Linear type=.3 watt
Taper type=.15 watt

over 10K ohms
Linear type=.2 watt
Taper type=.1 watt

RESIS.	TAPER	LENGTH	SHAFT DIA.	TYPE	FIG.	LENGTH THREAD	DIA. BODY	PART NUMBER
10%	semilog	5/8	5/32	flatted	E	1/4	5/8	18 4465A02
25K	10% CCW	1/8	1/8	slotted	F	1/4	3/4	18D 82072C02
25K	10% CCW	1/8	1/8	slotted	F	3/8	3/4	18D 82072C05
25K	linear	1/8	1/8	slotted	F	1/4	3/4	18K 848202
25K w/switch	10% CW	1/4	1/8	flatted	E	3/16	5/8	18C 82662D02
25K	10% CW	1/8	1/8	slotted	F	1/4	3/4	18K 867272
25K	linear	1/4	1/8	flatted	E	1/4	5/8	18C 82816E04
50K	linear	1/8	1/8	slotted	F	3/16	3/4	18K 844907
50K	linear	1/8	1/8	slotted	F	3/8	3/4	18K 863300
50K	linear	3/8	1/8	round	F	1/4	3/4	18K 867020
100K	10% CCW	1/8	1/8	slotted	F	3/8	3/4	18D 82072C06
100K	linear	1/8	1/8	slotted	F	3/8	3/4	18K 855906
200K	linear	3/8	1/8	round	E	1/4	3/4	18K 867019
300K	linear	1/8	1/8	slotted	F	3/8	3/4	18D 82072C03
300K	linear	1/8	1/8	slotted	F	3/8	3/4	18K 858871
500K	10% CCW	3/8	1/8	flatted	E	1/4	3/4	18D 847060
500K	linear	1/8	1/8	slotted	F	1/4	3/4	18K 848957
1 MEG	linear	1/8	1/8	slotted	F	1/4	3/4	18K 847062
1 MEG	linear	1/2	1/8	round	E	3/16	5/8	18C 82017F02

PRINTED CIRCUIT POTENTIOMETERS

A

C

D

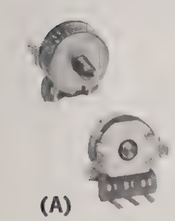
B

E

F

RESIS.	TAPER	WATTAGE	TYPE	PART NUMBER
20 ±20%	Linear	3W	F	18C83168C06
100 ±20%	Linear	3W	F	18C83168C02
100 ±20%	Linear	.25W	E	18-83083G27
100 ±30%	Linear	.25W	D	18C83083G15
500 ±10%	Linear	1.5W	F	18C83168C08
500 ±15%	Linear	.05W	B	18C82876B08
500 ±20%	Linear	2W	F	18C83168C01
500 ±30%	Linear	.25W	E	18C83083G21
1K ±20%	Linear	2W	F	18C83168C03
1K ±20%	Linear	.25W	C	18-83083G28
1K ±30%	CTS "A"	.25W	D	18-83083G04
1K ±30%	Linear	.25W	E	18C83083G14
2K ±15%	Linear	.05W	B	18C82876B04
2K ±20%	Linear	1.5W	F	18C83168C05
2.5K ±10%	Linear	.25W	C	18C83083G11
2.5K ±30%	Linear	.25W	E	18C83083G06
4K ±20%	Linear	.05W	A	18C82876B01
4K ±20%	Linear	.05W	B	18C82876B05
5K ±20%	Linear	.25W	E	18C83083G22
5K ±20%	Linear	.25W	C	18-83083G29
5K ±20%	Linear	1.5W	F	18C83168C07
5K ±30%	Linear	.25W	D	18C83083G07
10K ±20%	Linear	.05W	B	18C82876B06
10K ±20%	Linear	1.5W	F	18C83168C04
10K ±20%	Linear	.25W	C	18-83083G30
10K ±30%	Linear	.25W	E	18-83083G13
10K ±30%	Linear	.05W	A	18C82876B03
10K ±30%	Linear	.25W	D	18C83083G10
70K ±20%	Linear	.125W	A	18K 864068
20K ±20%	Linear	.125W	A	18K 867137
25K ±30%	CTS "A"	.25W	D	18-83083G03
25K ±30%	Linear	.25W	E	18-83083G24
25K ±30%	Linear	.25W	C	18C83083G16
50K ±20%	Linear	.05W	B	18C82876B07
50K ±30%	Linear	.25W	E	18C83083G20
50K ±30%	Linear	.25W	C	18-83083G26
100K ±20%	Linear	.125W	A	18B 861480
100K ±30%	Linear	.25W	C	18C83083G01
250K ±20%	Linear	.25W	E	18-83083G31
1M ±30%	Linear	.25W	E	18C83083G12
1M ±30%	Linear	.25W	D	18-83083G23

CARBON POTENTIOMETERS (Miniature Printed Circuit with 1/8″ Slotted Shafts)


(A)

(B)

(C)

POWER RATINGS

up to 100K ohms
Linear type=0.25 watt
Taper type=0.12 watt

over 100K ohms
Linear type=0.2 watt
Taper type=0.1 watt

RESIS.	TAPER	TYPE	PART NUMBER
500 ±30%	Linear	C	18D82238D11
1K ±30%	Linear	A	18D82238D04
2.5K ±30%	Linear	B	18D82238D05
5K ±30%	Linear	A	18D82238D20
10K ±10%	Linear	C	18D82238D15
20K ±10%	Linear	C	18D82238D14
25K ±30%	Linear	A	18D82238D06
50K ±30%	Linear	B	18-82238D18
100K ±10%	Linear	C	18D82238D13
100K ±30%	Linear	B	18D82238D08
500K ±30%	Linear	B	18D82238D16
1 Meg ±30%	Linear	B	18D82238D17

Resistor, Capacitor Assortments

RESISTOR ASSORTMENTS

Types included in assortments are indicated below.

PDK-61 RESISTOR ASSORTMENT—Contains 62 cards of the most commonly used values of ½-watt, 1-watt and 2-watt resistors for general replacement.

PDK-62 RESISTOR ASSORTMENT—Contains 63 cards of the most commonly used values of ¼-watt and ½-watt resistors. This assortment was specifically designed for resistor replacement in the "Motrac" Radio, "Handie-Talkie," pocket transmitter and other miniaturized-type radio equipment.

PDK 63 ¼ watt resistor selection contains 69 cards of standard values of ¼ watt, 10% resistors from 10 ohms to 5.6 megohms.

PDK 64 ½ watt resistor selection contains 75 cards of standard values of ½ watt, 10% resistors from 10 ohms to 22 megohms.

ST-105 Cabinet Only

PDK-65 Resistor Assortment—⅛-watt resistor selection contains 75 cards, 5 each of standard values of ⅛-watt 10% resistors from 10 ohms to 22 megohms.

PDK-61
RESISTOR ASSORTMENT
10 Resistors Per Card

OHMS	WATTS	OHMS	WATTS
150	½	270K	½
180	½	330K	½
220	½	390K	½
270	½	470K	½
330	½	680K	½
390	½	1.0MEG	½
470	½	1.5MEG	½
680	½	2.2MEG	½
1000	½	4.7MEG	½
1500	½	10	1
2200	½	22	1
2700	½	100	1
3300	½	180	1
3900	½	270	1
4700	½	1000	1
5600	½	3300	1
6800	½	4700	1
10K	½	10K	1
15K	½	15K	1
22K	½	22K	1
27K	½	33K	1
33K	½	47K	1
39K	½	68K	1
47K	½	100K	1
56K	½	220K	1
68K	½	180	2
100K	½	270	2
120K	½	1800	2
150K	½	3900	2
180K	½	68K	2
220K	½		

PDK-62
RESISTOR ASSORTMENT
10 Resistors Per Card

OHMS	WATTS	OHMS	WATTS
47	¼	120K	¼
82	¼	150K	¼
100	¼	220K	¼
150	¼	270K	¼
180	¼	330K	¼
220	¼	470K	¼
270	¼	1.0MEG	¼
470	¼	470	½
680	¼	1000	½
820	¼	2200	½
1000	¼	3300	½
1200	¼	4700	½
1500	¼	10K	½
1800	¼	15K	½
2200	¼	22K	½
2700	¼	33K	½
3300	¼	47K	½
3900	¼	68K	½
4700	¼	100K	½
5600	¼	120K	½
6800	¼	150K	½
8200	¼	180K	½
10K	¼	220K	½
12K	¼	270K	½
15K	¼	330K	½
22K	¼	390K	½
27K	¼	470K	½
33K	¼	560K	½
39K	¼	680K	½
56K	¼	1.0MEG	½
82K	¼	2.2MEG	½
100K	¼		

PDK-63
10% - ¼ WATT
RESISTOR ASSORTMENT

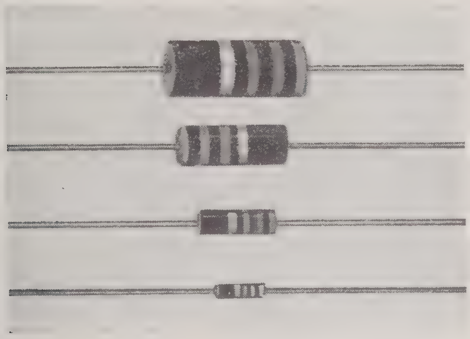
OHMS	OHMS
10	10K
15	12K
18	15K
22	18K
27	22K
33	27K
39	33K
47	39K
56	47K
68	56K
82	68K
100	82K
120	100K
150	120K
180	150K
220	180K
270	220K
330	270K
390	330K
470	390K
560	470K
680	560K
820	680K
1000	820K
1200	1.0MEG
1500	1.2MEG
1800	1.5MEG
2200	1.8MEG
2700	2.2MEG
3300	2.7MEG
3900	3.3MEG
4700	3.9MEG
5600	4.7MEG
6800	5.6MEG
8200	

PDK-64
10 - ½ WATT
RESISTOR ASSORTMENT
10 Resistors Per Card

OHMS	OHMS
10	12K
12	15K
15	18K
18	22K
22	27K
27	33K
33	39K
39	47K
47	56K
56	68K
68	82K
82	100K
100	120K
120	150K
150	180K
180	220K
220	270K
270	330K
330	470K
390	560K
470	680K
560	820K
680	1.0 MEG.
820	1.2 MEG.
1000	1.5 MEG.
1200	1.8 MEG.
1500	2.2 MEG.
1800	2.7 MEG.
2200	3.3 MEG.
2700	3.9 MEG.
3300	4.7 MEG.
3900	6.8 MEG.
4700	8.2 MEG.
5600	10 MEG.
6800	12 MEG.
8200	15 MEG.
10K	22 MEG.

PDK-65
10% - ⅛ WATT
RESISTOR ASSORTMENT
5 Resistors Per Card

OHMS	OHMS
10	15K
12	18K
15	22K
18	27K
22	33K
27	39K
33	47K
39	56K
47	68K
56	82K
68	100K
82	120K
100	150K
120	180K
150	220K
180	270K
220	330K
270	390K
330	470K
390	560K
470	680K
560	820K
680	1.0 meg
820	1.8 meg
1000	2.2 meg
1200	2.7 meg
1500	3.3 meg
1800	3.9 meg
2200	4.7 meg
2700	5.6 meg
3300	6.8 meg
3900	8.2 meg
4700	10 meg
5600	12 meg
6800	15 meg
8200	18 meg
10K	22 meg
12K	



RESISTORS

Molded, insulated composition resistors designed to give high quality performance at low cost. Leads are permanently anchored to insure noise-free operation. K = 1,000. MEG. = 1,000,000. Only resistors of 10% tolerance of ⅛, ¼, ½, 1 & 2 watt rating are available on file cards (10 resistors to a card). All others not on cards are sold as indicated in price listing.

Carbon resistors in order of ohms

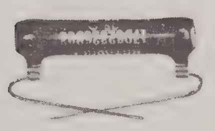
OHMS	Tol.	1/8W	1/4W	1/2W	1W	2W
10	5%			6R114018	6R129512	6S127A01
	10%	6S185B55	6K129755	6R5621	6R488022	6R488033
12	5%			6R114262		
	10%	6S185B56		6R2030		6R118237
15	5%				6R129513	
	10%	6S185B57	6R131377	6R2034	6R118227	6R476059
18	5%			6R6412		
	10%	6S185B58	6R131650	6R2031	6-10053F19	6R118238
22	5%			6R400272		
	10%	6S185B59	6R131641	6R6406	6R488026	6R2009
27	5%		6R131523	6R400294		
	10%	6S185B60	6R131594	6R5683	6R5676	6R3994
33	5%			6R400422		
	10%	6S185B61	6R129754	6R2036	6R476075	6R488016
39	5%			6R114154	6R400436	
	10%	6S185B62	6R131652	6R2085	6R3961	6R488043
47	5%		6R131274	6R400056		
	10%	6S185B63	6R129233	6R5550	6R5583	6R488035
56	5%			6R5673		
	10%	6S185B64	6R129860	6R5614	6R2037	6R488090
68	5%			6R400424		
	10%	6S185B65	6R129861	6R2039	6R2032	6R118239
82	5%			6R2083		
	10%	6S185B66	6R129224	6R2035	6R488113	6R488222
100	5%			6R6408	6R5739	
	10%	6S185B67	6R129753	6R6326	6-10053F24	6R3963
120	5%			6R121691		
	10%	6S185B68	6K129617	6R5551	6R488021	6R118240
150	5%		6R131276	6R5645		
	10%	6S185B69	6K129862	6R6373	6R6330	6R3991
180	5%		6R129431	6R5672		
	10%	6S185B70	6K129662	6-5672	6R6390	6R3968
220	5%		6R131275	6R2002		
	10%	6S185B71	6K127800	6R6270	6R6389	6R488053
270	5%		6R131525	6R400057		
	10%	6S185B72	6K129752	6R6432	6R6336	6R476116
330	5%		6R129806	6R120638		
	10%	6S185B73	6K129775	6R6022	6R6254	6R488037
390	5%			6R400804		
	10%	6S185B74	6K129863	6R5554	6R5598	6R3995
470	5%		6R129709	6R400812		
	10%	6S185B75	6K127801	6R6090	6R5593	6R2010
560	5%		6R129779	6R400058		
	10%	6S185B76	6K129620	6R6291	6R5584	6R488036
680	5%		6R129984	6R5651	6R488044	
	10%	6S185B77	6K128599	6R6040	6R5594	6R490015
820	5%		6R129818	6R119172		
	10%	6S185B78	6K129432	6R6269	6R5701	6R2046
1000	5%		6R129805	6R6411		
	10%	6S185B79	6K127802	6R6229	6R6327	6R3922
1200	5%		6R129708	6R6166		
	10%	6S185B80	6K129235	6R6393	6R5770	6-10053H71
1500	5%		6R129681	6R400459		
	10%	6S185B81	6R127803	6R6038	6R5700	6R2005
1800	5%		6R129820	6R400059		
	10%	6S185B82	6R129269	6R2089	6R5620	6-129569
2200	5%		6R129804	6R2028	6R5745	6R490016
	10%	6S185B83	6R128689	6R6069	6R6409	6R5687
2700	5%		6R129707	6R5652		
	10%	6S185B84	6R128688	6R5577	6R5686	6R5764
3300	5%		6R129981	6R2003		
	10%	6S185B85	6R129231	6R5581	6R5718	6R2029
3900	5%		6R129819	6R2024		
	10%	6S185B86	6R129232	6R5659	6R5618	6R476012
4700	5%		6R129669	6R3924		
	10%	6S185B87	6R127804	6R6080	6R5576	6R5671
5600	5%		6R129982	6R3940		
	10%	6S185B88	6R129433	6R6117	6R5654	6R5765
6800	5%		6R129237	6R2001		
	10%	6S185B89	6R128687	6R6428	6R5691	6R5690
8200	5%		6R129983	6R400490		
	10%	6S185B90	6R128686	6R2004	6R5610	6R5725
10K	5%		6R129668	6R5556		6R129361
	10%	6S185B91	6R129225	6R6320	6R6430	6R6299
12K	5%		6R129887	6R2075		6R400061
	10%	6S185B92	6R129230	6R6394	6R5656	6R5766
15K	5%		6K129236	6R5726		6-10053G74
	10%	6S185B93	6R127805	6R6477	6R6431	6R5732
18K	5%		6R131526	6R488095	6-10053E41	
	10%	6S185B94	6R128904	6R5591	6R5734	6R476014
22K	5%		6R129667	6R6480		
	10%	6S185B95	6R128685	6R6397	6R6341	6R2098
27K	5%		6R129886	6R5786		6R488187
	10%	6S185B96	6R127806	6R6434	6R6427	6R2013
33K	5%		6R129526	6R2068		
	10%	6S185B97	6R127807	6R6410	6R6400	6R5768
39K	5%		6R129777	6R400076	6R400461	
	10%	6S185B98	6R128903	6R6487	6R5588	6R5731
47K	5%		6R131527	6R5772	6R2106	6R3925
	10%	6S185B99	6R128902	6R6048	6R6462	6R5736
56K	5%		6R128684	6R401006		
	10%	6S185C01	6R129242	6R6378	6R6402	6R5592
68K	5%		6R129299	6R6479		6R400409
	10%	6S185C02	6R129144	6R6074	6R6236	6R2079
82K	5%			6-129224	6R2100	6R400270
	10%	6S185C03	6R129145	6-125179	6R5575	6R5762
100K	5%			6R5553	6R2038	
	10%	6S185C04	6R129226	6R6031	6R6328	6R2099
120K	5%			6R2049		
	10%	6S185C05	6R128987	6R5631	6R5698	6R5781
150K	5%		6R128683	6R5559		
	10%	6S185C06	6R129146	6R6398	6R5721	6R118241

(Continued on next page)

Resistors

Continued from previous page.

OHMS	Tol.	1/8W	1/4W	1/2W	1W	2W
180K	5% 10%	6S185C07	6R129229	6R2061 6R6444	6R488029	6R2012
220K	5% 10%	6S185C08	6R129147	6R400066 6R6407	6-129615	6R5724
270K	5% 10%	6S185C09	6R131858 6R129227	6R2050 6R6414	6R6491	6R5769
330K	5% 10%	6S185C10	6R129473 6R129228	6R400067 6R2096	6-125793	6R490002
390K	5% 10%	6S185C11	6R128682	6R5777 6R5646	6R5723	6R400020
470K	5% 10%	6S185C12	6R129149 6R129148	6R5795 6R6377	6R400207 6R6459	6R2080
560K	5% 10%	6S185C13	6R129247	6R5796 6R5697	6R5666	
680K	5% 10%	6S185C14	6R131857 6R129010	6R5775 6R6475	6-10053F38	6R2081
820K	5% 10%	6S185C15	6R129188 6R129012	6R5773 6R6429	6R2053	6R118244
1.0MEG	5% 10%	6S185C16	6R129189 6R129013	6R5587 6R6046	6R5767	6R121909
1.2MEG	5% 10%	6S185C17	6R5779 6R129864	6R5653	6R490717	
1.5MEG	5% 10%	6S185C18	6R129014	6R400228 6R6460	6R488031	6R122539
1.8MEG	5% 10%	6S185C19	6R129150 6R129865	6R401017 6R488215	6R400113	6R119185 6-119185
2.2MEG	5% 10%	6S185C20	6R129009	6R2073 6R6433	6R2011	6R121469
2.7MEG	5% 10%	6S185C21	6R129239	6R488186 6R488136	6-127852	
3.3MEG	5% 10%	6S185C22	6R129011	6R488185 6-127538	6R488032	
3.9MEG	5% 10%	6S185C23	6R129866	6R488183 6R490110		
4.7MEG	5% 10%	6S185C24	6R129015	6R5586 6R6446	6R476018	
5.6MEG	5% 10%	6S185C25	6R129234	6R114253 6R3988		6R118200
6.8MEG	5% 10%	6S185C26		6R131258 6-131258		
8.2MEG	5% 10%	6S185C27		6R114114 6R5585		
10MEG	5% 10%	6-131196	6R131196	6R5622		6R121536
12MEG	5% 10%	6S185C29		6R400334		6R122545
15MEG	5% 10%	6S185C30		6R488184 6R476065		6-120242
18MEG	5% 10%	6S185C31				
22MEG	5% 10%	6S185C32		6R488158		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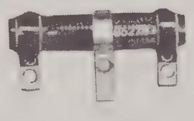
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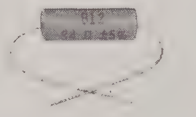
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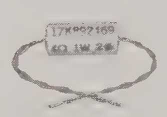
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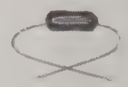
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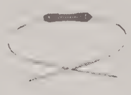
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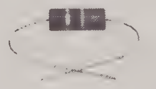
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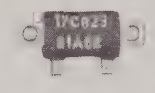
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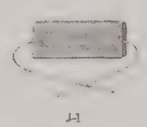
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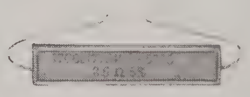

J-2

FIXED WIRE WOUND RESISTORS IN ORDER OF VALUE

Resistance Ohms	Tol. ±%	Watts	Terminal and Figure	Part No.
.035	3	1	Lead G	17-82069G04
.1	10	5	Lug A	17K861734
.1	5	3	Lead C	17C82291B24
.10	10	7	Lead J-2	17-82177B50
.15	10	5	Lug A	17K861735
.16	10	10	Lead J-2	17D82177B26
.16	10	1.0	Lead D	17C82350A05
.2	1	2	Lead C	17C82291B29
.25	5	30	Lug I	17-82381A22
.25	10	20	Lug A	17B857086
.25	10	20	Lug A	17D82326B10
.27	10	2	Lead C	17C82036G05
.3	5	2	Lead C	17C82036G24
.3	5	2	Lead C	17C82036G32
.32	1	3	Lead	17C82476B04
.33	10	1	Lead H	17K848766
.33	10	1/2	Lead H	17K890467
.33	1	2	Lead C	17C82291B23
.33	10	1	Lead D	17C82350A11
.39	10	5	Lead J-2	17-82177B49
.4	10	10	Lug A	17D82326B02
.47	10	1/2	Lead H	17K850984
.5	10	10	Lead A	17K805209
.5	5	5	Lug A	17K822499
.56	10	1	Lead H	17K850997
.56	5	2	Lead C	17C82036G18
.62	5	2	Lead C	17C82036G20
.667	1	3	Lead H	17C82476B03
.7	10	5	Lead J-1	17C82177B12
.7	10	10	Lug A	17D82326B09
.75	5	2	Lead C	17C82036G13
.75	3	1	Lead G	17C82069G03
.75	1	2	Lead C	17C82291B22
.82	10	5	Lead H	17C82488C02
1	10	2	Lead H	17K855604
1	5	1/2	Lead H	17K475649
1	10	5	Lead C	17K865772
1	10	25	Lug A	17K861376
1	5	3	Lead C	17C82291B07
1	10	10	Lug I	17C82381A12
1.5	10	1/2	Lead H	17K890466
1.5	10	1	Lead D	17C82350A07
1.5	5	3	Lead C	17C82291B08
1.5	10	3	Lead F	17-851523
1.8	10	1	Lead H	17K890469
2	10	10	Lug I	17C82381A02
2	2	1	Lead E	17K847359
2	10	25	Lug A	17K863774
2	10	1	Lead H	17K863773
2	3	1	Lead G	17A82069G01
2	10	2	Lead C	17C82036G03
2	10	5	Lead J-2	17-82177B53
2	3	2	Lead C	17C82036G26
2	5	20	Lug I	17C82381A13
2.2	5	2	Lead C	17C82036G19
2.33	1	3	Lead C	17C82476B02
2.5	5	20	Lug I	17C82381A07
2.5	10	5	Lead J-1	17C82177B10
2.5	5	10	Lead J-2	17C82177B11
2.5	3	1	Lead G	17C82069G02
2.7	10	1	Lead H	17C890468

FIXED WIRE WOUND RESISTORS IN ORDER OF VALUE (continued)

Resistance Ohms	Tol. ±%	Watts	Terminal and Figure		Part No.
2.7	5	1/2	Lead	H	17K892226
2.7	10	2	Lead	C	17C82036G06
2.7	5	2	Lead	C	17C82036G36
3	10	25	Lug	A	17K857102
3	5	10	Lug	A	17K850718
3	10	5	Lead	A	17K82839
3	10	3	Lead	F	17K852457
3	10	1.5	Lead	D	17C82350A01
3	10	5	Lead	J-1	17C82177B01
3	10	20	Lug	I	17C82381A09
3.3	10	2	Lead	H	17K893371
3.9	10	2	Lead	C	17C82036G02
3.9	5	1/2	Lead	H	17K837834
4	5	10	Lead	J-2	17C82177B14
4	10	3	Lead	E	17A82620B01
4	10	25	Lug	A	17K893619
4	2	5	Lug	A	17K850762
4	2	3	Lead	A	17B821901
4	2	1	Lead	E	17K892469
4	10	5	Lead	C	17K868694
4	5	5	Lead	J-1	17C82177B03
4	5	10	Lead	J-2	17D82177B19
4	5	20	Lug	I	17C82381A14
4	1	3	Lead	C	17C82476B06
4.3	5	2	Lead	C	17C82036G09
4.7	5	1/2	Lead	H	17K837833
5	10	15	Lug	I	17C82381A03
5	5	10	Lug	A	17K852448
5	10	5	Lead	J-1	17C82177B04
6	5	10	Lead	A	17K85491
6	10	1.5	Lead	D	17C82350A06
6.67	1	3	Lead	C	17C82476B01
6.8	10	1/2	Lead	H	17K850985
6.8	5	1	Lead	H	17K861289
7	5	10	Lug	A	17K832491
7	10	5	Lug	A	17K849324
7	10	5	Lead	C	17K865603
7.5	10	5	Lead	A	17K482472
8.2	5	1/2	Lead	H	17K892227
9	5	5	Lead	A	17K85492
10	5	5	Lead	A	17K892297
10	5	2	Lead	C	17C82036G08
10	10	5	Lead	J-1	17D82177B32
11.1	1	3	Lead	C	17C82476B05
12	10	15	Lug	I	17-82381A24
12.5	10	50	Lug	A	17K858372
13	5	2	Lead	C	17C82036G35
13	10	15	Lead	J-2	17-82177B44
15	10	10	Lead	A	17-847697
15	2	5	Lead	A	17K84494
15	5	5	Lead	J-1	17C82177B09
15	5	5	Lead	C	17C82291B06
15	5	7	Lead	C	17C82291B19
15	5	20	Lug	I	17-83389G01
15	10	20	Lug	I	17-82381A19
16	10	10	Lug	A	17K838571
17	10	15	Lead	J-2	17-82177B47
18	5	2	Lead	C	17C82036G27
20	5	10	Lug	I	17C82381A06
20	5	10	Lug	A	17K850719
20	10	5	Lead	C	17K868695
20	5	5	Lead	J-1	17C82177B07
20	5	5	Lug	A	17-82326B13
20	5	10	Lug	I	17-82381A06
22	10	10	Lug	A	17D82326B01
25	10	50	Lug	A	17K83918
25	10	10	Lead	J-2	17D82177B34
27	5	2	Lead	C	17C82036G04
30	5	5	Lead	A	17K85494
30	5	10	Lead	H	17D82326B11
32	5	5	Lead	J-1	17C82177B02
33	10	2	Lead	C	17C82036G11
35	10	3	Lead	F	17K867503
35	10	7	Lead	J-2	17-82177B46
40	2	2	Lead	C	17C82036G31
40	5	5	Lead	A	17K474955
40	10	5	Lead	J-1	17D82177B36
45	10	15	Lug	I	17-82381A20
47	10	1.5	Lead	D	17C82350A02
50	10	5	Lead	A	17K812897
50	10	10	Lug	A	17K81760
50	10	1.5	Lead	D	17C82350A03
50	5	3	Lead	C	17C82291B15
50	10	5	Lead	J-1	17D82177B18
50	10	7	Lead	J-2	17D82177B20
50	10	25	Lug	B	17B82063A02
51	5	1/2	Lead	C	17-82036G39
60	10	5	Lead	C	17C82291B30
68	10	2	Lead	C	17C82036G01
75	10	10	Lug	A	17K801780
75	10	7	Lead	J-2	17D82177B29
75	10	10	Lug	I	17C82381A11
80	10	3	Lead	D	17C82350A10
84	5	5	Lead	C	17C82291B12
100	10	10	Lug	A	17K801779
100	10	25	Lug	A	17K859545
100	10	5	Lead	J-1	17D82177B16
100	5	2	Lead	C	17C82036G28
100	5	3	Lead	C	17C82291B21
100	10	20	Lead	A	17D82326B07
120	5	5	Lead	J-1	17-82177B48
125	10	25	Lug	A	17K854083
150	3	3	Lead	C	17-82476B07
150	5	10	Lug	A	17K837759
175	5	15	Lug	I	17-82381A15
180	10	2	Lead	C	17C82036G10
180	5	2	Lead	C	17C82036G23
180	10	5	Lead	C	17C82291B05
180	5	3	Lead	C	17C82291B13
200	10	50	Lug	A	17K858348
200	10	5	Lead	J-1	17C82177B08
200	5	5	Lead	J-1	17D82177B40
270	10	10	Lead	C	17C82036G16
350	10	5	Lead	A	17K833841
350	10	20	Lead	A	17-82177B37
400	10	5	Lead	J-1	17D82177B31
400	5	5	Lead	C	17C82291B18
500	10	10	Lug	A	17K82232
500	10	15	Lug	I	17C82381A04
680	5	5¼	Lug	A	17-82326B14
750	10	10	Lead	A	17K80178
750	5	10	Lug	A	17K874346
750	5	5	Lug	A	17K874343
750	10	5	Lead	C	17C82291B26
900	5	5	Lead	C	17C82291B32
1000	10	5	Lead	J-1	17D82177B21
1000	3	5	Lead	C	17C82291B17
1000	10	3	Lead	F	17C82535B01
1200	5	3	Lead	C	17C82291B31
1200	5	5	Lead	C	17C82291B33
1250	10	50	Lug	A	17K850870
1250	5	10	Lug	A	17-893552
1500	10	10	Lug	A	17K834312
1500	10	15	Lead	J-2	17-82177B35
1500	10	25	Lug	A	17K86390
1800	10	35	Lug	A	17B892965
2000	10	35	Lug	A	17K892966
2000	10	25	Lug	A	17K890906
2000	10	10	Lead	A	17K107126
2000	10	5	Lug	A	17K823110
2000	10	15	Lead	J-2	17D82177B27
2200	10	5	Lead	J-1	17D82177B33
2200	10	10	Lug	A	17D82326B05
2500	5	10	Lead	C	17K483409
2500	5	5	Lead	A	17K811414
2700	5	3	Lead	J-1	17D82177B24
2700	10	5	Lead	J-1	17D82177B30
3000	10	25	Lug	A	17C83436
3000	5	10	Lug	A	17K800588
4000	5	10	Lug	A	17K800589
4500	5	5	Lead	A	17K872249
4500	10	7	Lead	J-2	17D82177B15
4600	5	5	Lead	C	17C82291B11
5000	10	25	Lug	A	17K86389
5000	10	5	Lead	A	17K837378
5000	10	10	Lead	J-2	17D82177B22
5600	5	5	Lead	C	17C82291B27
6000	10	25	Lug	A	17K804758
6000	10	10	Lead	J-2	17D82177B39
7000	10	5	Lead	A	17K842001
7500	10	25	Lug	A	17K890905
8000	5	10	Lug	A	17K480401
9100	5	5	Lead	C	17C82291B20
10,000	10	10	Lead	A	17K80162
10,000	10	5	Lead	A	17K82747
10,000	10	7	Lead	J-1	17-135542
16,200	5	5	Lead	C	17C82291B04
18,000	5	5	Lead	C	17-82291B34
25,000	10	25	Lug	A	17K842399
25,000	10	10	Lug	A	17K824569
27,000	5	10	Lead	A	17K890069

MOUNTING KITS

Kit includes screws, washers, nuts, eyelets and fibre washers for mounting resistors in upright position; enough material for mounting 5 resistors.

MODEL NO.	DESCRIPTION
*PDK171	5 & 10 watt size
PDK172	20 watt size
PDK173	35 watt size

*Mtgs. 5 ea. of 5 & 10 Watt Size

Capacitors

MYLAR CAPACITORS

Mylar* dielectric round tubular capacitors provide excellent stability over temperature range of −40°C to +85°C.

* Dupont Trade Mark

100 Volts

CAPACITY MFD	% TOL.	SIZE	PART NUMBER
.0033	10	.5 x .156	8K 861939
.0047	10	.5 x .156	8K 857303
.0068	20	9/16 x 1/4	8K 867165
.015	10	5/8 x .218	8K 859668
.015	10	.12 x .2 x .6	8-82317B07
.02	10	9/16 x 7/32	8K 863628
.047	10	13/16 x 1/4	8K 852471
.1	10	31/32 x .359	8K 864428
.12	10	1.06 x .328	8C 82396B06
.36	±5%	1.25 x .5	8C 82396B09
1.0	20	1.25 x .70	8K 859592
2.0	20	.81 x 1.75	8C 82396B04

200 Volts

CAPACITY MFD	% TOL.	SIZE	PART NUMBER
.001	10	1/2 x .156	8K 857474
.0022	10	1/2 x .156	8K 857475
.0068	10	.25 x .56	8K 868925
.01	10	1/2 x .171	8K 857473
.015	10	5/8 x 7/32	8K 854329
.022	10	3/4 x .312	8K 863508
.033	10	7/8 x .250	8K 863006
.05	10	.750 x .296	8C 82396B02
.068	10	13/16 x .312	8K 861094
.15	10	1 x 1/2	8K 867213
.47	10	1-3/8 x 1/2	8K 863028
1.0	10	1.62 x .56	8C 82396B01
2.0	10	.56 x 1.62	8K 863305
4.0	10	.81 x 1.38	8K 863550

400 Volts

CAPACITY MFD	% TOL.	SIZE	PART NUMBER
.0015	10	.719 x .202	8C 82396B05
.0047	20	11/16 x 1/4	8K 847106
.01	20	11/16 x 9/32	8K 847105
.015	10	5/8 x 3/8	8K 861259
.022	10	.812 x .312	8K 863322
.033	20	15/16 x 7/16	8C 845109
.047	10	15/16 x 13/32	8K 868503
.1	10	1 x .421	8K 858371
.15	10	1-1/4 x .468	8K 877098
1.0	10	2 x .812	8K 858370

ENCAPSULATED CAPACITORS

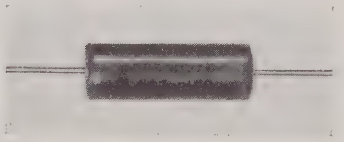
Mylar dielectric capacitors encapsulated with a phenolic resin. Rated continuous duty operation over a temperature range of —30°C to 85°C. (All 10% tolerance, except those indicated by asterisk (*) are 5%).

CAPACITY MFD	VOLTS	SIZE	PART NUMBER
.0068	200	.80 x .73 x .33	8C 82095G02
.056	200	.80 x .73 x .35	8C 82095G16*
.068	200	.80 x .73 x .35	8C 82095G04
.068	200	.80 x .64 x .35	8C 82095G15
.10	200	.80 x .74 x .38	8C 82095G06
.10	200	.80 x .71 x .38	8C 82095G13
.10	400	.80 x .95 x .56	8C 82095G08
.22	200	.90 x .40 x .187	8C 82095G17

OIL FILLED CAPACITORS

Metal Tubular

Hermetically sealed capacitors are unaffected by humidity or ambient temperature changes. Temperature range from −40°C to +85°C.



Types Available:

(1) Case and both leads insulated.
(2) Case insulated, one lead grounded.
(3) Case not insulated, both leads insulated.

MFD	VOLTS	SIZE	TYPE	PART NO.
.002	400	5/8 x 1/4	1	8K 800073
.005	400	7/8 x 21/64	1	8K 890976
.006	1600	1-1/4 x 5/8	1	8K 891969
.01	400	1 x 1/2	1	8A 83894
.015	600	1-1/16 x 9/16	2	8A 483686
.02	600	1-3/4 x 1/2	1	8K 890973
.02	1600	1-9/16 x 5/8	3	8K 801798

MFD	VOLTS	SIZE	TYPE	PART NO.
.03	1600	1-5/8 x 11/16	3	8K 811831
.05	400	1-1/2 x 5/8	1	8K 480594
.06	1600	2-3/16 x 3/4	3	8B 800146
.1	600	1-1/2 x 1/2	1	8A 83850
.1	1000	2 x 3/4	3	8K 831678
.50	400	2-1/8 x 5/8	1	8K 801644

TUBULAR POLYSTYRENE CAPACITORS

Round tubular capacitors constructed of polystyrene dielectric with special temperature stability characteristics. These capacitors have a negative temperature coefficient of 70-170 ppm/degree centigrade. All rated 50 volts. All 10% tolerance, except those indicated by asterisk (*) are 5%.

CAPACITY	SIZE	PART NUMBER
.001	.625 x .234	8C 82284C01
.0015	.625 x .234	8C 82284C02
.002	.625 x .266	8C 82284C03
.0033	.750 x .234	8C 82284C04
.0047	.750 x .266	8C 82284C05
.0068	.750 x .297	8C 82284C06
.0082	.750 x .328	8C 82284C07
.010	.875 x .297	8C 82284C08
.015	.875 x .328	8C 82284C09
.020	1.00 x .328	8C 82284C10
.033	1.00 x .359	8C 82284C11
.047	1.125 x .391	8C 82284C12

MYLAR DIELECTRIC CAPACITORS

Mylar dielectric capacitors epoxy-phenolic coated. Rated for continuous duty operation over the temperature range of −30°C to +85°C. All 10% tolerance except those indicated by asterisks (*) *5% **20%.

MFD.	VOLTAGE	SIZE	PART NUMBER
.0033	100	.656 x .531 x .190	8D 82905G25
.0036	100	.656 x .531 x .190	8D 82905G37*
.0047	100	.656 x .531 x .190	8D 82905G26
.01	50	.656 x .531 x .190	8D 82905G01
.01	100	.656 x .531 x .225	8D 82905G14
.015	50	.656 x .531 x .190	8D 82905G10
.015	100	.656 x .594 x .250	8D 82905G15
.018	100	.656 x .594 x .250	8D 82905G21
.02	100	.656 x .594 x .219	8D 82905G23
.022	200	.800 x .817 x .250	8D 82905G43
.030	50	.656 x .531 x .190	8D 82905G40*

CAPACITY MFD.	VOLTAGE	SIZE	PART NUMBER
.033	100	.781 x .594 x .250	8D 82905G16
.033	50	.656 x .531 x .190	8D 82905G08
.047	100	.906 x .594 x .250	8D 82905G17
.068	50	.656 x .594 x .230	8D 82905G04
.068	100	.781 x .719 x .312	8D 82905G18
.082	50	.781 x .594 x .281	8D 82905G45
.10	100	.906 x .719 x .312	8D 82905G22
.10	50	.781 x .594 x .281	8D 82905G07
.10	100	.906 x .531 x .312	8D 82905G24
.10	50	.781 x .594 x .281	8D 82905G30
.12	50	.781 x .719 x .281	8D 82905G09
.15	50	.781 x .719 x .312	8D 82905G05
.15	50	.781 x .719 x .312	8D 82905G34*
.22	50	.781 x .750 x .340	8D 82905G12
.22	50	.781 x .750 x .340	8D 82905G32
.33	50	.781 x .875 x .470	8D 82905G42
.33	100	1.125 x .533 x .400	8D 82905G46
.39	50	.781 x .875 x .500	8D 82905G41
.47	50	1.406 x .780 x .300	8D 82905G06
.47	50	1.406 x .780 x .300	8D 82905G33**

*5%
**20%

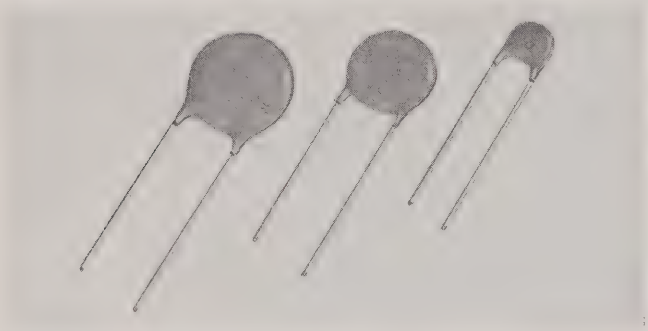
CAPACITORS, PAPER AND FILM DIELECTRICS IN ORDER OF VALUE

Capacity Mfd.	Tol. ±%	DC Wkg. Volts	Type		Part No.
.001	10	600	Oil, Paper	Metal tube	8K857096
.001	10	50	Polystyrene	Glass wrap	8C82284C01
.0015	10	50	Polystyrene	Glass wrap	8C82284C02
.0015	10	400	Mylar	Glass Wrap	8-82396B05
.002	20	400	Oil, Paper	Metal tube	8K800073
.002	20	400	Oil, Paper	Metal tube	8K85982
.002	10	50	Polystyrene	Glass wrap	8C82284C03
.0022	10	200	Mylar	Glass wrap	8K857475
.0033	10	100	Mylar	Glass wrap	8K861939
.0033	10	100	Mylar Rect.		8D82905G25
.0036	5	100	Mylar	Phenolic Resin	8D82905G37
.0047	20	400	Mylar	Glass wrap	8K847106
.0047	10	100	Mylar Rect.		8D82905G26
.0047	10	100	Mylar	Glass wrap	8K857303
.0047	10	50	Polystyrene	Glass wrap	8C82284C05
.005	10	600	Mylar	Phenolic tube	8B850625
.005	10	400	Oil, Paper	Metal tube	8K848506
.005	20	400	Oil, Paper	Metal tube	8K890976
.005	10	100	Mylar	Mylar sleeve	8C82548E03
.006	10	1600	Oil, Paper	Metal tube	8K891969
.0068	20	100	Mylar	Glass wrap	8K867165
.0068	10	50	Polystyrene	Glass wrap	8C82284C06
.0082	10	100	Mtlz-Mylar	Glass wrap	8C82317B06
.0082	10	50	Polystyrene	Glass wrap	8C82284C07
.01	10	600	Oil, Paper	Metal tube	8K83894
.01	20	400	Mylar	Glass wrap	8K847105
.01	20	400	Oil, Paper	Metal tube	8K890974
.01	10	200	Mylar	Glass wrap	8K857473
.01	10	50	Polystyrene	Glass wrap	8C82284C08
.01	10	100	Mylar Rect.	Phenolic Resin	8D82905G14
.01	10	50	Mylar Rect.	Phenolic resin	8C82905G01
.015	10	400	Oil, Paper	Metal tube	8K859639
.015	10	200	Mylar	Glass wrap	8K854329
.015	10	100	Mylar	Glass wrap	8K859668
.015	10	400	Mylar	Glass wrap	8K861259
.015	10	50	Polystyrene	Glass wrap	8C82284C09
.015	10	50	Mylar Rect.	Phenolic Resin	8D82905G10
.015	10	100	Mylar Rect.	Phenolic Resin	8D82905G15
.015	10	100	Mtlz-Mylar	Glass wrap	8C82317B07
.015	20	100	Mylar	Mylar sleeve	8C82548E02
.018	10	100	Mylar Rect.	Phenolic Resin	8D82905G21
.02	10	1600	Oil, Paper	Metal tube	8K801798
.02	20	600	Oil, Paper	Metal tube	8K890973
.02	10	200	Mylar	Glass wrap	8K867972
.02	10	400	Oil, Paper	Metal tube	8K483027
.02	10	400	Oil, Paper	Metal tube	8K836754
.02	20	400	Oil, Paper	Metal tube	8K85984
.02	10	200	Mtlz-Paper	Molded	8K861972
.02	10	100	Mylar Rect.	Phenolic Resin	8D82905G23
.02	10	50	Polystyrene	Glass wrap	8C82284C10
.02	10	50	Metallized Mylar	Glass Wrap	8C82317B09
.022	10	50	Mylar	Mylar Sleeve	8C82548E04
.022	10	200	Mylar	Phenolic Resin	8D82905G43
.022	10	600	Oil, Paper	Phenolic tube	8K865919
.022	10	200	Mylar	Glass wrap	8K852472
.022	10	400	Mylar	Glass wrap	8K863322
.022	10	200	Mylar	Glass wrap	8K863508
.022	10	50	Mylar	Phenolic Resin	8C82905G02
.023	5	50	Mylar	Phenolic Resin	8D82905G39
.03	10	1600	Oil, Paper	Glass wrap	8K811831
.03	20	600	Oil, Paper	Metal tube	8K890972
.030	5	50	Mylar	Phenolic Resin	8D82905G40
.03	10	50	Mtlz-Mylar	Glass wrap	8C82317B03
.033	20	400	Mylar	Glass wrap	8C845109
.033	10	100	Mylar	Phenolic Resin	8D82905G16
.033	10	50	Polystyrene	Glass wrap	8C82284C11
.047	20	150	Mylar	Glass wrap	8K847275
.047	10	100	Mylar	Glass wrap	8K852471
.047	10	100	Mylar Rect.	Phenolic Resin	8D82905G17
.047	10	400	Mylar	Glass wrap	8K868503
.047	10	50	Polystyrene	Glass wrap	8C82284C12
.05	10	600	Oil, Paper	Metal tube	8K806321
.05	20	50	Mylar	Glas Wrap	8-82396B07
.05	10	400	Oil, Paper	Metal tube	8K480594
.05	20	200	Mtlz-Paper	Molded	8K861479
.05	10	200	Mylar	Glass wrap	8C82396B02
.06	10	1600	Oil, Paper	Metal tube	8B800146
.065	5	200	Mylar	Phenolic Resin	8C82095G16
.068	10	100	Mtlz-Mylar	Glass wrap	8K868588
.068	10	200	Mylar	Glass wrap	8K861094
.068	10	200	Mylar	Phenolic Resin	8C82095G15
.068	10	50	Mylar	Molded	8C82427B01
.068	10	50	Mylar Rect.	Phenolic Resin	8D82905G04
.068	10	200	Mylar	Phenolic resin	8C82095G04
.068	10	100	Mylar Rect.	Phenolic Resin	8D82905G18
.082	10	50	Mylar	Phenolic Resin	8C82905G45
.082	10	100	Mtlz-Mylar	Glass wrap	8K868593

Capacitors, paper and film dielectrics in order of value (continued)

Capacity Mfd.	Tol. ±%	DC Wkg. Volts	Type		Part No.
.1	10	1000	Oil, Paper	Metal tube	8K831678
.1	10	600	Oil, Paper	Phenolic tube	8K865915
.1	10	400	Mylar	Glass wrap	8K858371
.1	20	100	Mtlz-Mylar	Metal feed thru	8-82571B02
.1	10	100	Mtlz-Mylar	Glass wrap	8K868590
.1	10	100	Mylar	Glass wrap	8K864428
.1	10	100	Mylar	Phenolic Resin	8D82905G22
.1	10	400	Mylar	Phenolic Resin	8-82095G08
.1	10	100	Mtlz-Mylar	Glass wrap	8C82317B01
.1	10	200	Mylar	Phenolic resin	8C82095G06
.1	10	100	Mylar Rect.	Phenolic Resin	8D82905G24
.1	10	50	Mylar Rect.	Phenolic resin	8C82905G07
.1	10	50	Mylar	Phenolic Resin	8D82905G30
.12	10	100	Mtlz-Mylar	Glass wrap	8K868592
.12	10	100	Mylar	Glass Wrap	8-82396B06
.12	10	50	Mylar Rect.	Phenolic Resin	8D82905G09
.15	10	400	Mylar	Glass wrap	8K877098
.15	20	200	Mylar	Glass wrap	8K865659
.15	10	200	Mylar	Glass wrap	8K867213
.15	10	100	Mtlz-Mylar	Glass wrap	8K868595
.15	10	50	Mylar Rect.	Phenolic resin	8D82905G05
.15	5	50	Mylar	Phenolic Resin	8D82905G34
.2	−0+50	400	Oil, Paper	Metal tube	8B812999
.22	10	100	Mtlz-Mylar	Glass wrap	8K868594
.22	20	600	Oil, Paper	Metal tube	8C865794
.22	10	150	Mylar	Glass wrap	8K846299
.22	10	200	Mylar	Glass wrap	8K863321
.22	10	200	Mylar	Molded	8C82095G17
.22	10	50	Mylar Rect.	Phenolic Resin	8D82905G12
.25	10	100	Mtlz-Mylar	Glass wrap	8C82317B02
.25	20	400	Oil, Paper	Metal tube	8A844460
.25	20	400	Oil, Paper	Metal tube	8A892986
.25	10	200	Oil, Paper	Metal tube	8B892201
.25	10	100	Mtlz-Mylar	Glass wrap	8K868596
.33	10	50	Mylar	Phenolic Resin	8D82905G42
.33	10	100	Mylar	Phenolic Resin	8D82905G46
.36	5	100	Mylar	Glass Wrap	8C82396B09
.39	10	100	Mtlz-Mylar	Glass wrap	8K868591
.39	10	100	Mylar Rect.	Phenolic Resin	8D82905G13
.39	10	50	Mylar	Phenolic Resin	8D82905G41
.47	20	400	Mylar	Glass wrap	8C82396B03
.47	20	600	Mylar	Phenolic tube	8K857502
.47	10	200	Mtlz-Mylar	Glass wrap	8K863994
.47	10	200	Mtlz-Mylar	Vinyl tube	8C82017C01
.47	10	200	Mylar	Glass wrap	8K863028
.47	10	200	Paper, Mylar	Resin	8D82927C04
.47	10	100	Mylar	Glass wrap	8K861614
.47	10	400	Mtlz-Mylar	Glass wrap	8C82317B05
.47	10	50	Mylar Rect.	Phenolic resin	8D82905G06
.47	20	50	Mylar	Phenolic Resin	8D82905G33
.5	10	600	Oil, Paper	BTUB	8B801591
.5	20	100	Mtlz-Mylar	Metal Feed-Thru	8C82571B01
.5	10	600			
1.0	10	400			
.75	−0+20	200	Oil, Paper	Metal tube	8K892202
.8	−10+20	1000	Oil, Paper	Metal Oval	8D82390A04
.8	−10+20	1000			
1	10	400	Mylar	Glass wrap	8K858370
1	10	200	Mtlz-Paper	Molded	8K864965
1	20	100	Mylar	Glass wrap	8K859592
1	20	400	Mylar	Glass wrap	8B82905B01
2	10	400	Oil, Paper	BTUB	8K890339
2	10	200	Mtlz-Mylar	Glass wrap	8C863305
2	20	200	Oil, Paper	BTUB	8K81769
2	20	100	Mylar	Glass wrap	8C82396B04
4	10	200	Mtlz-Mylar	Glass wrap	8K863550
.1-.1	10	600	Oil, Paper	BTUB	8B813326
.5-.5	+20−10	600	Oil, Paper	BTUB	8D82122B02
1.0	20	600	Oil Filled	BTUB	8D82122B04
1.0	20	600			
.5	20	1100	Oil, Paper	Metal oval less bracket	8D82390A02
.5		1100			
1.0		450			
2.0	+20−10	1000	Oil, Paper	Metal oval	8K868942
.6	10				
5.4	+5−20				
1		600	Oil, Paper	Metal oval	8C861325
.47		600			
2		400			
1		900	Oil, Paper	Metal oval	8K861326
.47		900			
2		400			

CERAMIC DISC CAPACITORS

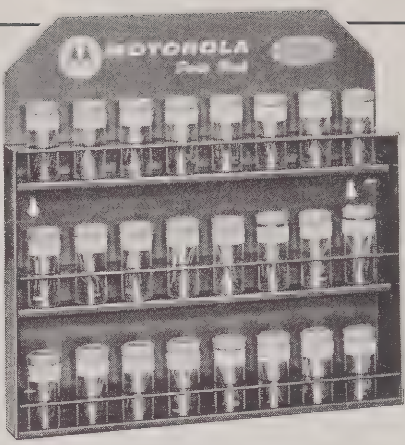


Low inductance dipped ceramics for bypass, coupling and general applications in high-frequency circuits. Disc Ceramics (Sizes range from 7/32″ to ⅝″ dia.). All rated at 500V, except those indicated by †(600 V) ♦(250 V).

TYPE N capacitors decrease in capacity with an increase in temperature. Type N470, for example, will show a decrease in capacity of 470 parts per million per degree centigrade increase in temperature.

Explanation of EIA temperature characteristic designation

TEMPERATURE RANGE	MAXIMUM CAPACITY CHANGE OVER TEMP. RANGE
X5 = −55°C to +85°C	Suffix F = ±7.5%
Y5 = −30°C to +85°C	Suffix R = ±15%
Z5 = +10°C to +85°C	Suffix U = +22%-56%



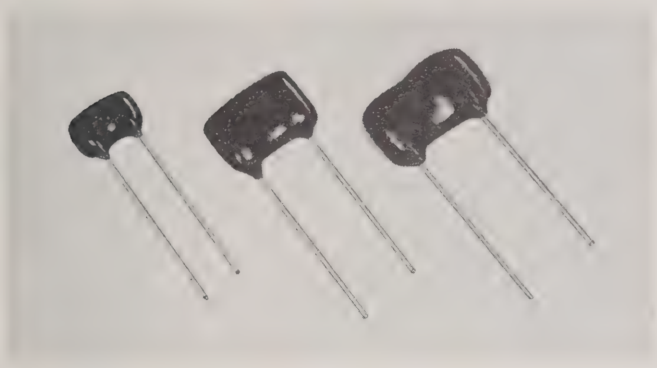
PDK 212 CERAMIC DISC CAPACITOR ASSORTMENT WITH FREE METAL RACK

This convenient assortment of NPO capacitors includes the most commonly used values required for general day-to-day servicing. Capacitors are packaged in clear plastic tubes with easy-to-read labels for fast identification and selection. The metal storage rack ST-174 is included FREE with this assortment.

Capacitors included in Motorola's recommended assortment are indicated by asterisks (*). ALL CERAMIC CAPACITORS ARE PACKAGED 5 TO A TUBE.

MMF	% TOL.	TEMP. COEFF.	PART NO.	
2	.25 MMFD	NPO	21K	857336*
3	.5 MMFD	NPO	21K	852259*
3.3	.5 MMFD	NPO	21K	840067
3.3	.25 MMFD	N330	21K	859214
3.9	.25	NPO	21K	838284
4	10	N150	21K	847052♦
4	5	N330	21K	849320
4	5	NPO	21K	840850*
5	5	NPO	21K	840847*
5	5	N150	218	863466
6	5	NPO	21K	840848*
6	.25 MMFD	NPO	21K	838113
6	5	N150	21K	864746
6	5	N330	21K	849333
7.5	.5 MMFD	NPO	21K	857337
8	.5 MMFD	NPO	21K	847743*
8	.5 MMFD	N150	21K	838912
8	5	N330	21K	849319
9	.5 MMFD	N150	21K	859642
10	5	NPO	21K	868206*
10	5	N470	21K	840811
12	5	NPO	21K	847874*
13	5	NPO	21K	867302
13	5	N330	21K	865054
14	5	N330	21K	836528
15	5	NPO	21K	840846*
15	5	N330	21K	861217
16	5	NPO	21K	848525
16	5	N330	21K	857228
18	5	NPO	21R	122235*
18	5	N330	21K	868897
20	5	NPO	21K	840849*
20	5	N150	21K	849334
20	5	N330	21D	82355B06
22	5	N150	21K	859472
22	5	N330	21D	82355B05
24	5	NPO	21K	840365*
24	5	N150	21K	840716
24	5	N220	21K	840845
27	5	N330	21K	840895
30	5	NPO	21D	82355B11*
30	5	N150	21K	849335
30	5	N330	21D	82355B07
33	5	NPO	21D	82355B09
33	5	N150	21K	855809♦
36	5	NPO	21K	852185*
40	5	NPO	21K	849338
51	5	NPO	21D	82355B10*
56	5	NPO	21K	865320
56	5	N150	21K	859219
68	5	NPO	21K	865480*
100	5	NPO	21K	865391*
220	10	X5F	21C	82187B08
270	10	X5F	21C	82187B04
330	10	X5F	21K	863629
390	10	X5F	21K	865922
470	10	Y5F	21C	82187B07
560	10	Y5F	21C	82187B06
680	10	X5F	21K	865452
800	10	X5R	21K	847070*
820	10	X5F	21B	837745
1000	10	X5F	21K	865923*†
1500	−0+100	Z5U	21B	800801*
2000	10	X5F	21K	837746*
3300	10	X5F	21K	857334
3900	10	X5F	21K	837996
4700	10	X5F	21K	837747
5000	20	Z5U	21C	82447C01*
.01	20	Z5U	21B	801139*†
.02	−20+80	Z5U	21K	401029*†

DUR-MICA CAPACITOR

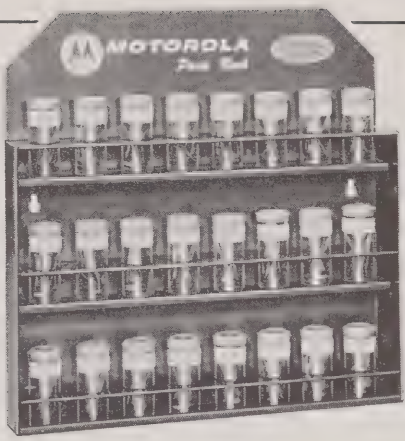


The new Dur-Mica capacitor replaces the molded mica and standard silver mica units formerly used in Motorola equipment. Special plastic coating on this capacitor provides added durability and improved moisture resistance, particularly in the higher temperature range. Dur-Mica capacitors operate efficiently from —40° to +100°C with temperature coefficients in the NPO range.

The Dur-Mica capacitor is the smallest mica capacitor available. These units meet or exceed all applicable MIL and EIA standards.

MMFD	% TOL.	DCWV	SIZE	PART NO.
3	.5	500	DM-15	21K 867845
4	.5	500	DM-15	21K 867844
5	10	500	DM-15	21K 871966
10	.5MMFD	300	DM-15	21K 847088
10*	5	500	DM-15	21K 859934
11	.5MMFD	300	DM-15	21K 847089
12*	5	500	DM-15	21K 859935
15*	5	500	DM-15	21K 859936
20*	5	500	DM-15	21K 859940
21	5	300	DM-15	21K 848272
24*	5	500	DM-15	21K 859937
27	2	300	DM-15	21K 847771
30*	.5MMFD	500	DM-15	21K 848156
34	2	300	DM-15	21K 847772
36*	5	500	DM-15	21K 840712
39	5	500	DM-15	21K 867249
43	5	500	DM-15	21D 82537B07
47	5	500	DM-15	21K 868681
51*	5	500	DM-15	21K 840711
51	10	500	DM-15	21K 840044
62	5	500	DM-15	21K 852322
68	2	500	DM-15	21K 873266
75*	5	500	DM-15	21K 859938
80	2	300	DM-15	21K 847091
90	2	300	DM-15	21K 865941
100*	5	500	DM-15	21K 850118
100	10	500	DM-15	21K 840046
110*	5	500	DM-15	21K 859939
120*	.5MMFD	500	DM-15	21K 840713
130*	5	500	DM-15	21K 859941
150*	5	500	DM-15	21K 840047
170	3	500	DM-15	21K 865441
175	3	500	DM-15	21K 868205
190	3	500	DM-15	21K 848978

DM—19—41/64 x ½
DM—15—29/64 x ⅜
DM—20—41/64 x ½



PDK 211 DUR-MICA CAPACITOR ASSORTMENT WITH FREE METAL RACK

This assortment puts the capacitor you want at your fingertips. Sturdy, clear plastic tubes protect the capacitors during shop storage or field use. Each tube is readily identified by an appropriate label. Use the convenient metal rack on the bench or hang it on the wall.

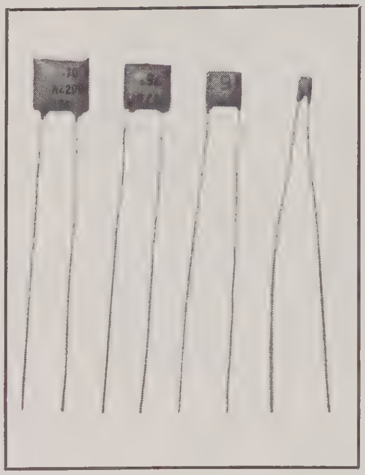
Capacitors set off by asterisks are included in recommended assortment.

MMFD	% TOL.	DCWV	SIZE	PART NO.
200*	5	500	DM-15	21K 840812
220*	5	500	DM-15	21K 859942
220	10	300	DM-15	21K 847087
240*	5	500	DM-15	21K 840048
250*	5	500	DM-15	21K 859943
270	5	300	DM-15	21K 859178
270	10	300	DM-15	21K 847085
300*	5	500	DM-15	21K 859944
330	2	500	DM-15	21K 873267
330	10	300	DM-15	21K 874351
345	5	500	DM-15	21K 840813
390	3	500	DM-15	21K 848977
390	10	300	DM-15	21K 848158
390*	5	500	DM-15	21K 859945
470	5	300	DM-15	21D 82537B06
470	10	300	DM-15	21K 850510
500*	5	500	DM-19	21K 859946
510	5	300	DM-15	21K 845214
510*	5	500	DM-19	21K 859947
565	5	500	DM-19	21K 863948
650	5	300	DM-15	21K 848236
750	10	300	DM-15	21K 848159
800	5	300	DM-15	21K 840049
820	2	300	DM-15	21K 873269
1000*	5	500	DM-19	21K 847601
1200	5	300	DM-19	21K 874352
1300	5	500	DM-19	21K 864736
1500	2	500	DM-20	21K 863291
2000*	5	500	DM-19	21K 859948
2500	5	500	DM-19	21K 859773
3000	5	500	DM-20	21K 850994
5000	5	100	DM-19	21K 857481
5100	5	300	DM-20	21K 874354

* Included in Motorola Recommended Assortment PDK211
Capacitors 300 MMFD or less are packed 5 to a tube; larger values are packed 3 to a tube.

SPECIAL MICRO-MINIATURE CERAMIC T.C. CAPACITORS

Rectangular ceramic dielectric capacitors, temperature compensating type, suitable for use in tuned circuits of miniature portable equipment over the temperature range of −40°C to +85°C.



CAPACITY in uuf	% TOL	VOLT	TEMP. COEFF.		SIZE		PART NO.
				L	H	T	
2.2	.25 uuf	75	N150 ± 60	.100	.100	.060	21D 82877B07
2.8	.25 uuf	75	NPO ± 30	.115	.115	.080	21D 82877B08
3.3	.25 uuf	75	NPO ± 30	.135	.135	.080	21K 861603
3.8	.25 uuf	75	NPO ± 120	.115	.115	.070	21D 82877B09
4.0	10	75	N150 ± 60	.100	.100	.080	21K 861427
4.3	.25 uuf	75	NPO ± 60	.115	.115	.070	21D 82877B37
5.0	5	75	N150 ± 60	.115	.115	.070	21D 82877B17
5.0	10	75	N150 ± 60	.150	.150	.080	21D 82877B21
5.0	10	75	N150 ± 60	.150	.150	.080	21K 864014
5.6	10	75	N470 ± 30	.155	.155	.080	21D 82877B40
6.0	10	75	N150 ± 60	.135	.135	.080	21K 861428
6.5	.5 uuf	75	NPO ± 60	.115	.115	.070	21D 82877B10
7.0	5	75	N150 ± 30	.140	.140	.080	21D 82877B13
8.0	5	75	N80 ± 60	.140	.140	.080	21K 867807
8.0	10	75	N150 ± 60	.140	.140	.080	21K 861429
10	10	75	N150 ± 30	.150	.150	.060	21D 82877B23
10.5	5	75	NPO ± 30	.155	.155	.070	21D 82877B11
11	10	75	N150 ± 30	.170	.170	.080	21D 82877B45
10	10	75	N150 ± 30	.150	.150	.060	21K 861430
12	10	75	N150 ± 30	.170	.170	.080	21K 861431
15	5	75	NPO ± 30	.220	.220	.080	21D 82877B19
15	10	75	N150 ± 30	.180	.180	.080	21K 861462
15	10	75	N150 ± 30	.180	.180	.080	21D 82877B22
18	10	75	N150 ± 30	.180	.180	.080	21D 82877B46
18	10	75	N750 ± 75	.155	.155	.080	21D 82877B39
20	10	75	N150 ± 30	.200	.200	.080	21K 861432
24	10	75	N150 ± 30	.220	.220	.080	21B 82877B01
25	10	75	N150 ± 30	.200	.200	.080	21K 865197
30	5	75	NPO ± 30	.270	.270	.080	21D 82877B18
30	10	75	N150 ± 30	.220	.220	.080	21D 82877B06
30	10	75	N750 ± 75	.155	.155	.080	21K 864521
36	10	75	N150 ± 30	.245	.245	.080	21K 861433
40	10	75	N150 ± 30	.250	.250	.080	21K 861434
40	10	150	N150 ± 30	.312	.250	.094	21K 847054
50	10	75	N150 ± 30	.300	.300	.100	21K 864013
50	10	150	N150 ± 30	.312	.250	.094	21K 847055
50	10	75	N750 ± 75	.220	.220	.080	21D 82877B03
50	10	50	NPO ± 30	.215	.215	.060	21D 82877B31
60	10	75	N750 ± 120	.205	.205	.080	21D 82877B42
60	10	75	N150 ± 30	.300	.300	.100	21K 864012
70	10	75	N150 ± 30	.300	.300	.100	21K 861435
80	10	75	N150 ± 30	.325	.325	.100	21K 864067
80	10	50	NPO ± 30	.265	.265	.060	21D 82877B32
90	5	75	N750 ± 120	.270	.270	.080	21K 859202
90	10	75	N80 ± 30	.350	.350	.100	21K 864522
90	10	50	NPO ± 30	.280	.280	.060	21D 82877B33
100	10	150	N150 ± 30	.400	.400	.100	21K 868384
100	10	75	N150 ± 75	.250	.250	.080	21K 861436
100	10	75	N2200 ± 400	.180	.180	.080	21K 861437
120	10	75	N150 ± 30	.385	.385	.100	21D 82877B15
150	10	50	NPO ± 30	.250	.500	.090	21D 82877B34
150	10	75	N1400 ± 250	.220	.270	.080	21D 82877B02
150	10	75	N750 ± 120	.320	.320	.100	21D 82877B05
220	10	75	N1400 ± 250	.260	.260	.080	21K 861438
220	10	75	N1400 ± 250	.235	.340	.100	21K 868829
220	10	75	N1400 ± 250	.260	.260	.080	21D 82877B24
220	10	75	N470 ± 30	.420	.420	.130	21D 82877B35
250	10	75	N750 ± 75	.370	.370	.100	21D 82877B36
345	10	75	N2200 ± 400	.290	.290	.100	21K 861439
470	10	75	N2200 ± 400	.330	.320	.100	21K 861440
500	10	75	N4700 ± 900	.320	.160	.080	21K 861441

MOLDED PHENOLIC CAPACITORS

Molded fixed composition capacitors for operation in high frequency coupling and bypass applications. All rated at 500 volts. Operating temperature range −40°C. to +85°C. with excursions to +105°C.

All composition capacitors are packaged 5 to a tube.

MMF.	% TOL.	SIZE	PART NUMBER
0.1	10	.400 X .160	21K838048
0.15	5	.400 X .160	21K881064
0.2	5	.400 X .160	21K830200
0.24	5	.330 X .160	21K867162
0.3	5	.330 X .160	21K830201
0.3	10	.250 X .160	21D82450B01
0.3	10	.230 X .070	21D82450B26
0.36	5	.330 X .160	21K842041
0.36	10	.250 X 160	21K891049
0.39	5	.250 X .107	21D82450B07
0.39	10	.230 X .070	21D82450B21
0.47	5	.255 X .160	21K865266
0.47	10	.230 X .070	21D82450B24
0.47	20	.330 X .160	21K83994
0.51	5	.250 X .107	21D82450B29
0.51	10	.255 X .160	21D82450B02
0.56	10	.250 X .107	21K864519
0.62	5	.250 X .160	21K859677
0.62	10	.250 X .107	21D82450B16
0.75	10	.230 X .070	21D82450B22
0.75	10	.250 X .107	21D82450B06
0.82	10	.330 X .160	21K475679
1.0	10	.230 X .070	21D82450B28
1.0	10	.250 X .107	21-82450B28
1.0	20	.250 X .160	21K83959
1.2	5	.250 X .107	21D82450B08
1.5	5	.250 X .107	21D82450B13
1.5	10	.230 X .070	21D82450B27
1.5	10	.240 X .107	21K861453
1.8	5	.230 X .070	21D82450B30
2.0	5	.250 X .107	21D82450B18
2.2	5	.250 X .107	21D82450B17
2.2	10	.240 X .160	21K84247
2.7	5	.250 X .107	21D82450B32
3.0	5	.250 X .107	21D82450B11
3.3	5	.250 X .107	21D82450B15
3.9	10	.250 X .107	21D82450B03

Capacitors in order of value

CAPACITY UUF	% TOL.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
0.1	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21K838048
0.15	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K881064
0.2	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K830200
0.20	−5−	—	500	Mld. Comp.	21D82450B35
0.24	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K867162
0.3	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K830201
0.3	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B01
0.36	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21K891049
0.36	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K842041
0.39	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B07
0.47	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K865266
0.47	±20%	±(6%+.Oluuf)	500	Mld.Comp.	21K83994
0.51	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B02
0.56	−5−	—	500	Mld. Comp.	21D82450B33
0.62	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B16
0.62	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21K859677
0.75	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B06
0.82	±10%	±(6%+.Oluuf)	500	Mild.Comp.	21K475679
0.85	−5−	—	500	Mild.Comp.	21D82450B36
1	−5−	—	500	Mld. Comp.	21D82450B34
1	±20%	±(6%+.Oluuf)	500	Mld.Comp.	21C83959
1.2	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B08
1.5	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21K861453
1.5	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B13
2.0	±.25uuf	NPO	500	Disc	21K857336
2.0	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B18
2.2	±10%	±(6%+.Oluuf)	500	Mld.Comp.	21K84247
2.2	±10%	N150	75	Rect.	21K861426
2.2	±5%	±(6%+.Oluuf)	500	Mld.Comp.	21C82450B17
3.0	±0.25uuf	NPO	2,000	Disc	21K868935
3.0	±0.25uuf	N750	500	Disc	21K849332
3.0	±0.5uuf	NPO	500	Disc	21K852259

Capacitors

CAPACITY UUF	% TOL.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
3.0	±5%	±(6% +.01uuf)	500	Mld.Comp.	21C82450B11
3.3	±0.25uuf	NPO	500	Disc	21K868910
3.3	±0.25uuf	N330	500	Disc	21K859214
3.3	±0.25uuf	NPO	75	Rect.	21K861603
3.3	±0.5uuf	NPO	500	Disc	21K840067
3.3	±5%	±(6% +.01uuf)	500	Mld.Comp.	21C82450B15
3.8	±.25pf	NPO	75	Rect.	21D82877B09
3.9	±0.25uuf	N470	500	Disc	21K838284
3.9	±10%	Mld.Comp. N470	500		21C82450B03
4	±0.25uuf	Disc NPO	500		21K849320
4	±0.5uuf	NPO	500	Disc	21K840850
4	±10%	N150	75	Rect.	21K861427
4.25	±0.25uuf	NPO	250	Disc	21K863205
4.3	±0.25uuf	NPO	75	Rect.	21D82877B37
4.7	±.25pf	NPO	500	Disc	21D82355B39
5	±5%	N750	200	Disc	21D82610C15
5	±5%	N470	500	Disc	21D82355B01
5	±5%	N150	500	Disc	21K863466
5	±10%	N150	75	Rect.	21K864014
5	±0.5uuf	NPO	500	Disc	21K840847
5.6	±10%	N470	75	Rect.	21D82877B40
6	±10%	N150	75	Rect.	21K861428
6	±5%	N150	500	Disc	21K864746
6	±0.5uuf	NPO	500	Disc	21K840848
6	±0.25uuf	N330	500	Disc	21K849333
6	±0.25uuf	N750	500	Disc	21K838113
6	±0.5uuf	NPO	500	Disc	21D82204B03
6	±5%	N470	500	Disc	21D82355B19
6.0	±0.5uuf	NPO	75	Rect.	21D82877B38
6.6	±5%	N150	250	Disc	21D82204B07
6.8	±5%	N150	500	Disc	21D82355B04
6.8	±.25pf	NPO	500	Disc	21D82355B38
6.8	±.25pf	N150	500	Disc	21D82133G76
6.8	±0.5uuf	N3300	200	Disc	21D82610C12
7.5	±.25pf	N150	500	Disc	21D82133G64
7.5	±0.5uuf	NPO	500	Disc.	21-857337
8	±0.25uuf	N150	500	Disc	21K838912
8	±0.25uuf	NPO	500	Disc	21K851846
8	±0.5uuf	N330	500	Disc	21K849319
8	±0.5uuf	N470	500	Disc	21K851681
8	±0.5uuf	NPO	500	Disc	21K847743

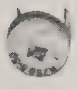
CAPACITY UUF	% TOL.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
8	±10%	N150	75	Rect.	21K861429
8	±10%	N150	75	Rect.	21K867807
8.2	±5%	NPO	500	Disc	21K865357
9.0	±0.5uuf	N150	500	Disc	21K859642
10	±10%	N150	75	Rect.	21D82877B23
10.0	±5%	NPO	500	Disc	21K868206
10.0	±5%	N470	500	Disc	21K840811
10.0	±0.5uuf	N150	500	Disc	21K838686
10.0	±5%	N150	250	Disc	21K847056
10.0	±10%	N150	75	Rect.	21K861430
10	±0.25uuf	NPO	500	Disc	21D82355B26
10.5	±5%	NPO	75	Rect.	21D82877B11
11	±10%	N150	75	Rect.	21D82877B45
12	±5%	NPO	500	Feed-Thru	21K859875
12	±5%	NPO	500	Disc	21K847874
12	±10%	N1500	500	Disc	21K855348
12	±5%	N150	500	Disc	21D82133G73
12	±5%	N470	500	Disc	21K864739
12	±10%	N150	75	Rect.	21K861431
12	±10%	N470	75	Rect.	21D82877B47
13	±5%	N470	500	Disc	21D82355B28
13	±5%	N330	500	Disc	21K865054
13	±5%	NPO	500	Disc	21K867302
14	±5%	N220	500	Disc	21D82355B20
14	±5%	N330	500	Disc	21K836528
15	±10%	N150	75	Rect.	21D82877B22
15	±5%	N220	500	Disc	21K861288
15	±5%	N330	500	Disc	21K861217
15	±5%	NPO	500	Disc	21K840846
15	±10%	N150	75	Rect.	21K861462
15	±5%	N750	75	Rect.	21K859203
16	±5%	N1500	1,000	Disc	21K868383
16	±5%	N330	500	Disc	21K857228
16	±5%	NPO	500	Disc	21K848525
16	±5%	N750	250	Disc	N220
18	±5%	N150	500	Disc	21D82133G77
18	±5%	N220	500	Disc	21D82133G63
18	±5%	NPO	500	Feed-Thru	21K851767
18	±5%	N470	500	Disc	21K865942
18	±5%	N330	500	Disc	21K868897
18	±10%	N750	75	Rect.	21D82877B39

CAPACITY UUF	% TOL.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
18	±10%	N150	75	Rect.	21D82877B46
20	±7.5%	N2200	75	Rect.	21D82877B12
20	±5%	N1500	200	Disc	21D82204B19
20	±10%	N150	75	Rect.	21K861432
20	±5%	N150	500	Disc	21K849334
20	±5%	NPO	500	Disc	21K840849
20	±10%	N150	250	Disc	21K847081
20	±5%	N750	500	Disc	21K859695
20	±5%	P100	500	Disc	21K859698
20	±5%	N330	500	Disc	21D82355B06
20	±5%	N150	200	Disc	21D82610C13
22	±5%	N150	500	Disc	21K859472
22	±5%	N330	500	Disc	21D82355B05
24	±5%	N750	500	Disc	21D82355B15
24	±5%	N330	500	Disc	21D82355B03
24	±5%	N80	500	Feed-Thru	21K857335
24	±5%	N220	500	Disc	21K840845
24	±5%	NPO	500	Disc	21K840365
24	±5%	N150	500	Disc	21K840716
24	±5%	N80	500	Disc	21K837995
24	±10%	N150	75	Rect.	21C82877B01
24	5	N750	500	Disc	21D82355B15
25	±10%	N150	75	Rect.	21K865197
27	±5%	N75	500	Disc	21K849336
27	±5%	N330	500	Disc	21K840895
27	±5%	NPO	500	Disc	21D82133G58
30	±5%	NPO	75	Rect.	21D82877B18
30	±5%	N470	500	Disc	21K859697
30	±5%	N150	500	Disc	21K849335
30	±5%	N1500	500	Disc	21K872060
30	±10%	N750	75	Rect.	21K864521
30	±5%	N150	200	Disc	21D82610C14
30	±10%	N150	200	Disc	21D82610C38
33	±5%	NPO	500	Disc	21D82355B09
33	±5%	N330	500	Disc	21D82355B08
33	±5%	N75	500	Disc	21K859220
33	±5%	N150	250	Disc	21K855809
36	±5%	N330	250	Disc	21K834092
36	±5%	NPO	500	Disc	21K852185
36	±10%	N150	75	Rect.	21K861433
36	±5%	N220	200	Disc	21D82610C04
39	±5%	NPO	500	Disc	21K852184
39	±5%	NPO	450	Disc	21D82610C06
40	±5%	N150	500	Disc	21D82133G68
40	±5%	NPO	500	Disc	21K849338

CAPACITY UUF	% TOL.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
40	±5%	N150	150	Rect.	21K847054
40	±10%	N150	75	Rect.	21K861434
40	±5%	N150	200	Disc	21D82610C01
40	±5%	NPO	100	Disc	21D82610C45
40	±5%	N220	100	Disc	21D82610C46
43	±5%	N220	200	Disc	21D82610C02
47	±5%	N330	300	Disc	21K859211
47	±5%	N220	200	Disc	21D82610C03
50	±10%	N150	150	Rect.	21K847055
50	±10%	N150	75	Rect.	21K864013
50	±10%	N750	75	Rect.	21C82877B03
50	±10%	NPO	50	Rect.	21D82877B31
51	±5%	N1500	500	Disc	21D82355B13
51	±5%	N80	500	Disc	21K838729
51	±5%	NPO	500	Disc	21B82355B10
51	±5%	N150	200	Disc	21D82610C07
56	±5%	N150	500	Disc	21K859219
56	±5%	—	500	Mica	21D82537B21
56	±5%	NPO	500	Disc	21K865320
56	±5%	N750	500	Disc	21K863623
57	±5%	N150	200	Disc	21D82610C05
57	±5%	N220	100	Disc	21D82610C47
60	±5%	DM15	100	Rect.	21D82537B19
60	±10%	N750	75	Rect.	21D82877B42
60	±10%	N150	75	Rect.	21K864012
62	±5%	N330	500	Disc	21K855997
62	±5%	N750	500	Disc	21K872063
62	±5%	NPO	100	Disc	21D82610C43
62	±5%	N220	100	Disc	21D82610C42
68	±5%	N150	500	Disc	21D82355B31
68	±5%	N220	500	Disc	21D82355B16
68	±5%	NPO	500	Disc	21K865480
68	±5%	N330	500	Disc	21D82610C30
70	±10%	N150	75	Rect.	21K861435
75	±5%	N220	500	Disc	21D82355B17
80	±10%	N750	250	Disc	21K847770
80	±10%	N150	75	Rect.	21K864067
82	±5%	N2200	500	Disc	21B82204B05
90	±10%	N080	75	Rect.	21K864522
90	±5%	N750	75	Rect.	21K859202
90	±10%	NPO	50	Rect.	21D82877B33
91	±5%	NPO	500	Disc	21D82355B27
100	±5%	N220	100	Disc	21D82610C44
100	±10%	N750	100	Disc	21D82610C58
100	±10%	N1500	1,000	Disc	21D82204B06

Capacitors

CAPACITY UUF	% Tol.	TEMP. COEFF.	DC WKG. VOLTS	TYPE	PART NO.
100	±5%	NPO	500	Disc	21K865391
100	±10%	N750	300	Disc	21K831125
100	±10%	N150±30	150	Rect.	21K868384
100	±10%	N2200	75	Rect.	21K861437
100	±10%	N750	75	Rect.	21K861436
100	±5%	N750	500	Disc	21D82355B21
110	±5%	N150	1,000	Disc	21D82204B27
120	±5%	N470	200	Disc	21D82610C51
150	±10%	X5F	500	Disc	21C82187B32
150	±5%	Y5D	200	Disc	21D82428B50
150	±10%	NPO	50	Rect.	21D82877B34
150	±10%	±7.5%	500	Disc	21K863147
150	±10%	N1400	75	Rect.	21C82877B02
150	±10%	N750	75	Rect.	21C82877B05
220	−10−75	N1400		Rect.	21D82877B24
220	±10%	N470	25	Rect.	21D82877B35
220	±10%	X5F	500	Disc	21C82187B08
220	±10%	N1400	75	Rect.	21K868829
220	±10%	N1400	75	Rect.	21K861438
250	±10%	N750	75	Rect.	21D82877B36
270	±10%	X5F	500	Disc	21C82187B04
270	±10%	X5F	500	Disc	21C82187B10
330	±10%	X5F	600	Disc	21K863629
345	±10%	N2200	75	Rect.	21K861439
390	±5%	—	100	Mica	21-82537B34
390	±10%	X5F	500	Disc	21K865922
470	±10%	Y5F	500	Disc	21C82187B07
470	±20%	+10, −20	500	Feed-Thru	21C821474
470	±10%	N2200	150	Rect.	21K858114
470	±10%	N2200	75	Rect.	21K861440
470	±5%	Y5D	200	Disc	21D82428B51
500	GMV	−40%, 20%	25	Rect.	21K847065
500	±10%	N4700	75	Disc	21K861441
560	±5%	—	100	Mica	21D82537B22
560	±10%	Y5F	500	Disc	21C82187B06
600	±10%	X5R	600	Disc	21K851299
680	±10%	X5F	500	Disc	21K865452
800	±10%	X5R	600	Disc	21K847070
820	±10%	X5F	500	Disc	21K837745
930	±5%	Y5D	200	Disc	21D82428B54
1000	±3%	—	100	Mica	21-82537B38
1000	±10%	Y5D	100	Disc	21D82428B48
1000	±5%	DM15	100	Rect.	21D82537B16
1000	±20%	X5F	3,000	Insl. Disc	21C82648B01
1000	±20%	X5F	3,000	Disc	21K868902
1000	±20%	X5F	2,000	Disc	21K868717
1000	±20%	Z5U	600	Disc	21K859601
1000	−0, +100%		500	Feed-Thru	21B861219
1000	±10%	X5F	500	Disc	21K865923
1000	±10%	X5F	100	Disc	21C82187B14
1150	±5%	—	100	Mica	21-82537B36
1250	±5%	—	500	Mica	21-82537B41
1500	±2%	—	500	Mica	21-82537B39
1500	±10%	X5F	1,000	Disc	21K868996
1500	−0, +100%	Z5U	500	Disc	21K800801
1500	±25%	−40%, −20%	250	Rect.	21K858107
1500	±25%	−40%, −20%	250	Rect.	21K844163
1500	±10%	X5F	100	Disc	21C82187B11
2000	±10%	X5F	500	Disc	21K837746
2000	±10%	X5F	500	Disc	21K858102
2000	GMV	−50%, −40%	300	Rect.	21C831126
2000	±15%	Z5U	250	Disc	21K855384
2000	−20%, +100%	−40%, −20%	75	Rect.	21K864457
2000	−20%, +100%	−65%, −75%	75	Rect.	21K861442
2200	±20%	X5F	3,000	Disc	21C82187B01
2000	±5%	Y5D	200	Disc	21D82428B47
2000	±10%	Y5D	500	Disc	21D82428B36
2700	±10%	X5F	3,000	Disc	21K868906
3000	±25%	−40%, −20%	250	Rect.	21K858108
3000	±10%	X5F	100	Disc	21C82187B16
3300	±10%	X5F	500	Disc	21K857334
3300	±10%	X5F	100	Disc	21C82187B05
3300	±10%	X5R	100	Disc	21D82428B10
3900	±10%	X5F	500	Disc	21K837996
4700	±5%	X5R	100	Disc	21D82428B49
4700	±10%	X5F	500	Disc	21K837747
4700	±10%	X5U	100	Disc	21D82428B09
4700	±10%	—	200	Disc	21D82428B56
5000	±20%	Z5U	500	Disc	21C82447C01
5000	±10%	X5R	500	Disc	21D82428B15
5100	±10%	—	2,000	Disc	21D82428B55
8200	±1%	DM30	500	Rect.	21D82537B15
CAPACITY UF					
.01	±20%	X5U	1,000	Disc	21D82428B41
.01	−20, +80%	Y5U	500	Disc	21D82428B35
.01	±10%	−30, +15%	1,000	Disc	21C82164B01
.01	−20, +80%	Z5U	600	Disc	21K801139
.01	−40, +60%	Y5U	250	Disc	21K832501
.01	−0, +100%	−65, −75%	150	Rect.	21K847064
.01	−30, +70%	X5U9	100	Disc	21D82428B11
.01	−30, +70%	X5U9	500	Disc	21D82428B06
.01	−20. +100%	−65, −75%	75	Rect.	21K861443
.02	−20, +80%	Z5U	600	Disc	21K401029
.02	−20+80%	—	200	Disc	21D82428B63
.02	−40, +60%	Y5V	250	Disc	21K832502
.02	−0, +100%	−65, −75%	150	Rect.	21K847301
.02	−40, +60%	−80, −60%	100	Disc	21C82606A01
.02	−40, +10%	Y5V	100	Disc	21D82428B08
.02	−20, +100%		75	Rect.	21K861444
.02	±20%	Y5S	50	Disc	21K859471
.05			10	Disc	21B82032D01
.10	−0, +100%		3	Disc	21K864015
.22	−0, +100%		3	Disc	21B861478
2X.0015	−0, +100%	Z5U	500	Disc	21K800836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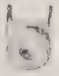
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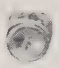
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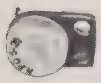
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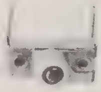
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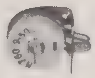
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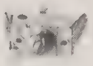
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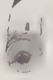
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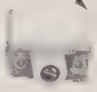
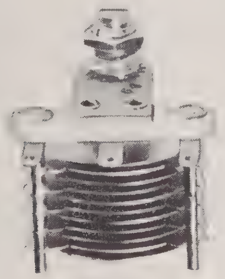


J

CERAMIC TRIMMERS

CAPACITY MIN.	MAX.	TYPE	FIG.	PART NUMBER
1.5	7	NPO	D	20-82109C05
1.5	18	NPO	G	20-83201B07
1.5	18.8	NPO	E	20-84579B08
1.5	20	NPO	G	20-83201B01
2	8	NPO	C	20-82399D10
2.5	9.0	NPO	H	20-84260H02
3	10	NPO	C	20-82399D08
3	12	NPO	A	20-848635
3	12	NPO	D	20-850615
3	15	N-650	C	20-82399D06
3	12	NPO	C	20-82959G03
3.5	14	N-300	C	20-82399D13
4	40	NPO	G	20-83201B06
4	40	NPO	G	20-82301B09
4	37.5	NPO	G	20-84579B05
5	25	NPO	D	20-848235
5	25	NPO	A	20-859643
5	25	NPO	A	20-864740
5	25	NPO	D	20-82109C02
5	25	NPO	D	20-82109C02
5	25	NPO	D	20-82984E03
5	25	NPO	C	20-82959G01
5	30	N-750	D	20-82109C04
5.5	18	NPO	C	20-82399D04
5.5	18	NPO	J	20-87644C01
5.5	18	NPO	C	20-82399D12
6	25	NPO	F	20-82860B02
7	57	NPO	G	20-84579B06
7	94	NPO	E	20-84218B01
7	95	NPO	I	20-84613A04
8	50	N-750	D	20-840719
8	50	N-750	A	20-847059
8	50	N750	D	20-82109C03
8	60	NPO	G	20-83201B02
9	35	N-650	B	20-82399D02
9	35	N-650	C	20-82399D05
9	50		F	20-82860B01
15	60	N-1500	C	20-82399D07
15	80	NPO	(Not Shown)	20-84219B01
15	115	NPO	G	20-83201B04
20	100	N-2100	A	20-863152
20	100	N-2100	D	20-82109C01
24	188	NPO	E	20-84218B02
24	190	NPO	E	20-84613A02
24	190	NPO	I	20-84613A05
55	280	NPO	E	20-84613A03
55	280	NPO	I	20-84613A06
55	282	NPO	E	20-84218B03
55	280	NPO	I	*20-84613A07
80	329	NPO	I	*20-84613A08
90	376	NPO	E	20-84218B04
170	506	NPO	G	20-84218B05

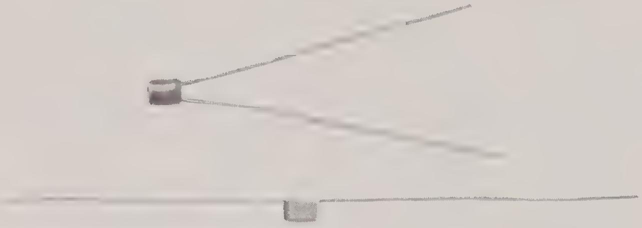
*High voltage 250V dc



TRIMMER CAPACITORS, AIR DIELECTRIC

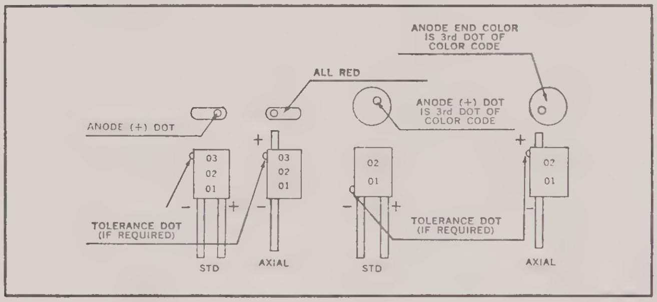
CAPACITY MAX.	MIN.	VOLTAGE RATING	DIMENSIONS LENGTH	WIDTH	HEIGHT	SHAFT TYPE	MOUNTING	PART NO.
3.96	2.2	850VRMS	1⅜″	⅝″	¾″	Std Slotted	¼-32 NEF	19-859088
6.75	2.7	850VRMS	1½″	⅝″	¾″	Std Slotted	¼-32 NEF	19-859089
6.75	2.7	850VRMS	1½	⅝	¾	Std Slotted	¼-32 NEF	19B82475E01
7.4	2.4	850VRMS	1½	⅝	¾	Std Slotted	¼-32 NEF	19B847063
8.7	1.7	750VRMS	1 7/32	⅝	¾	Std Slotted	¼-32 NEF	19A820263
13.5PF	2.93PF	850V	1.20	.781	.906	Slotted	4-40 NC	19C83221D01
13.5	2.93	850VRMS	1 13/64″	25/32″	29/32″	Std Slotted	4-40 NC	*19-83221D02
13.8	3.7	1200VRMS	1⅜	1⅜	1⅜	Std Slotted	6-32 NC or ⅜-32 NEF	19C802737
14.2	2.3	750VRMS	1 13/32	⅝	¾	Std Slotted	¼-32 NEF	19C475605
15.0	4.2	1600V.PK	1 35/64	25/32	1 1/32	Hex. Bush Slt'd.	ˉ4-40 THD	19B82319A01
18PF	5PF	1750VRMS	1.093	1.687	.1687	Plain	—	*19C82767H01
19.6	2.7	750VRMS	1 37/64	⅝	¾	Std Slotted	¼-32 NEF	19K800032
20.6	3.1	500VRMS	1 1/16	5/16	1 7/32	Locking	4-40 NC	*19K850503
21.9	4.1	500VRMS	1¼	15/16	1	Locking	4-40 NC	*19A830230
24.3PF	2.4PF	650V	.785	.500	.563	Slotted	—	19C83191D01
28.9	3.7	500VRMS	1 5/16	15/16	1 7/32	Locking	4-40 NC	19A84648
32	3	750VRMS	1 21/32	⅝	¾	Std Slotted	¼-32 NEF	19K859115
33.5	5.5	1000VRMS	1 27/32	15/16	1 7/32	Locking	4-40 NC	*19B830246
33.5	5.5	1000VRMS	1 27/32	15/16	1 7/32	Locking	4-40 NC	*19B858032
35	7	800VRMS	2 1/16	1 21/32	1	Locking	⅜-32 NEF	*19A81121
42.8	7	—	1 27/32	31/32	1 7/32	Std Slotted	5/16-32 NEF	19A475604
52.5	4.9	800VRMS	1 13/16	15/16	1 7/32	Locking	4-40 NC	19B838179
53.5	4.5	500VRMS	1 5/16	15/16	1 7/32	Locking	4-40 NC	*19K847767
90.0PF	5.35PF	850V	1.520	.781	.906	Slotted	4-40 NC	*19C83598A01
114.2PF	8.7PF	500VRMS	1.220	.937	1.219	Locking	4-40 NC	*19A863833
140	7.1	500VRMS	2 9/32	15/16	1 7/32	Locking	4-40 NC	*19A830291

*Rotor Grounded To Mtg. Posts.



Solid electrolyte tantalum capacitors

In *non-metallic* cases for use in portable radio equipment. Because of small sizes, values are shown in standard EIA-(RETMA) color coding. Numbers indicated on capacitor drawings are color code sequence and position.


ANODE END COLOR IS 3rd DOT OF COLOR CODE
ALL RED
ANODE (+) DOT
ANODE (+) DOT IS 3rd DOT OF COLOR CODE
+
03
02
01
03
02
01
02
01
02
01
−
+
−
−
+
+
−
TOLERANCE DOT (IF REQUIRED)
TOLERANCE DOT (IF REQUIRED)
STD
AXIAL
STD
AXIAL

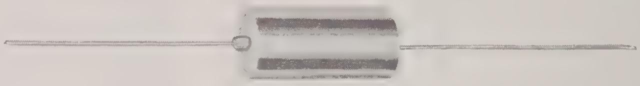
Mfd.	Volts	% Tol.	Color Code	Part Number
.022	20	10	Red-Red-Org.	*23D82397D13
.056	35	10	Grn-Blu-Org.	23D82397D10
.068	35	10	Blu-Gry-Org.	*23D82397D11
.082	35	10	Gry-Red-Org.	23D82397D14
.10	35	10	Brn-Blk-Yel.	23D82397D26
.12	20	10	Brn-Red-Yel.	23D82397D12
.12	35NP	20	Brn-Red-Yel.	23D82397D20
.15	35	+40−20	Brn-Grn-Yel.	23D82397D08
.22	20	20	Green	**23D83441B06
.22	35	+40−20	Red-Red-Yel.	23D82397D06
.27	20	10	Red-Vio-Yel.	23D82397D25
1.0	9	20	Yellow	**23D83441B05
1.0	20	10	Brn-Blk-Grn.	23D82397D36
1.5	20	10	Brn-Grn-Grn.	23D82397D27
2.2	6	20	Red	**23D83441B04
2.2	10	+40−20	Red-Red-Grn.	23D82397D19
2.2	10	+40−20	Red-Red-Grn.	*23D82397D32
3.3	20	20	Org-Org-Grn.	23D82397D28
3.3	35	±20	Org-Org-Grn	23-82397D43
4.7	4	+40−20	Yel-Vio-Grn.	23D82397D05
6.8	10	20	Blu-Gry-Grn.	23D82397D09
6.8	15NP	20	Blu-Gry-Grn.	23D82397D38
6.8	20	20	Blu-Gry-Grn.	23D82397D23
10	2	20	Brn-Blk-Blu.	*23D82397D22
10	6	20	Brn-Blk-Blu.	23D82397D03
10	20	20	Brn-Blk-Blu.	23D82397D15
10	20	20	Brn-Blk-Blu.	*23D82397D31
15	6	±10	Blue	23-83441B07
15	15	20	Brn-Grn-Blu.	23D82397D04
15	20	20	Brn-Grn-Blu.	23D82397D17
22	15	20	Red-Red-Blu.	23D82397D16
33	6	20	Org-Org-Blu.	23D82397D01
33	10	20	Org-Org-Blu.	23D82397D18
47	3	20	Yel-Vio-Blu.	23D82397D02
47	6	20	Yel-Vio-Blu.	23D82397D21
47	6	20	Yel-Vio-Blu.	*23D82397D30
47	10	±20	Red	23-83441B08
100	10	±20	Red	23-83441B09

*Axial Leads
**Epoxy Dipped

Solid Tantalum Capacitors in Non-Metallic Cases

For use over the temperature range of −55°C to +85°C

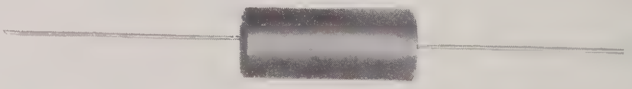
Mfd.	Volts	% Tol.	Size Dia. X Length	Part No.
0.068	35	±10	.115 x .305	23-84762H15
0.47	50	±20	.115 x .305	23-84762H14
1.0	35	±20	.115 x .305	23-84762H06
2.2	25	±20	.115 x .305	23-84762H04
3.9	15	±20	.115 x .305	23-84762H08
4.7	10	±20	.115 x .305	23-84762H07
4.7	25	±20	.180 x .305	23-84762H05
4.7	35	±10	.180 x .305	23-84762H01
6.8	15	±20	.180 x .305	23-84762H12
10.0	20	±10	.180 x .305	23-84762H03
15.0	20	±20	.200 x .540	23-84762H09
22.0	15	±20	.200 x .540	23-84762H10
22.0	20	±10	.200 x .540	23-84762H16
23.0	6	±20	.180 x .350	23-84762H13
33.0	15	±20	.200 x .540	23-84762H11
47.0	6	±10	.200 x .540	23-84762H02



Tantalum metal tubular capacitors

In hermetically sealed *metallic* cases for use over the temperature range of −30°C to +85°C.

Mfd.	Volts	% Tol.	Size	Part No.
.1	75	20		23-82783B38
1	15	10	.282x.141	23D82783B14
1	35	10	.282x.141	23D82783B26
1	50	20	.282x.141	23D82783B10
2.2	35	20	.469x.191	23D82783B28
4.7	20	20	.681x.295	23D82783B31
4.7	25	10	.357x.191	23D82783B25
4.7	35	20	.469x.191	23D82783B11
8.2	35	10	.682x.295	23D82783B19
10	25	10	.470x.191	23D82783B27
15	25	5	.470x.185	23D82783B13
15	35	20	.295x.681	23D82783B33
22	35	20	.295x.681	23D82783B32
33	6	20	.469x.191	23D82783B20
33	25	20	.680x.289	23D82783B07
33	35	10	.781x.357	23D82783B22
39	10	10	.191x.469	23D82783B36
39	35	20	.781x.357	23D82783B21
47	6	20	.470x.185	23K868446
47	25	20	.295x.681	23D82783B37
47	35	20	.781x.357	23D82783B23
68	15	10	.682x.289	23D865594
100	10	10	.682x.289	23D864366
100	15	5		23-82783B39
100	25	20	.782x.351	23D82783B04
150	6	20	.682x.295	23D82783B09
150	10	5		23-82783B40
200	10	20	.406x1.5	23D83210A07
300	10	20	.406x1.25	23D83210A06



Metal case hermetically sealed insulated capacitors

For use over the range of −20°C to +85°C.

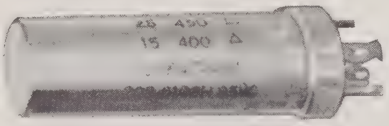
Mfd.	Volts	% Tol.	Size	Part No.
5	25	−10 +50	1¼x11/16	23K824135
5	350	−10 +50	1¾x11/16	23K837929
10	450	−10 +50	1¾x13/16	23K837903
20	350	−10 +50	1¾x15/16	23K483459
25	25	−10 +100	1¼x9/16	23K483807
25	50	−10 +100	1¼x9/16	23K850516
25	100	−10 +100	1½x13/16	23-839917
60	150	−10 +100	1¾x15/16	23K863877
100	25	−15 +100	1¾x13/16	23K892549

Hermetically sealed aluminum electrolytic capacitors

For use over the temperature range of −30°C to +85°C.

Mfd.	Volts	% Tol.	Size	Part No.
1	25	−10+150	.812x.281	23D82601A30
1	250	−10+150	.812x.344	23-82601A16
2	25	−10+250	.562x.250	23D82601A04
2	25	−10+150	.625x.375	23D82601A20
3	100	−10+150	.625x.250	23D82601A15
5	25	−10+ 33	.687x.250	23D82601A11
5	25	−10+100	1.062x.406	23D82601A22
5	150	−15+100	.812x.421	23-82077C02
5	250	−10+100	1.125x.375	23D82601A14
5	300	−10+150	1.375x.421	23-82077C08
10	20	−10+150	.625x.250	23D82601A23
10	300	−10+100	1.375x.640	23-82077C06
15	25	−10+150	.937x.281	23D82601A31
15	150	−10+100	1.125x.375	23D82601A17
16	10	−10+ 33	.687x.250	23D82601A10
20	25	− 0+100	.75 x.375	23D82601A03
25	20	−10+100	.812x.406	23D82601A26
25	25	−10+150	.75 x.375	23D82601A01
25	50	−10+150	.875x.375	23D82601A08
35	100	−10+100	1.375x.375	23D82601A13
50	20	−10+150	.062x.406	23D82601A24
50	25	−10+150	.875x.375	23D82601A05

Mfd.	Volts	% Tol.	Size	Part No.
50	35	−10+150	1.062x.406	23-82601A36
60	15	−10+150	.875x.375	23D82601A02
60	15	−10+150	.937x.406	23D82601A28
60	25	−10+150	1.125x.375	23D82601A07
60	50	−10+150	1.375x.375	23D82601A06
60	50	−10+150	1.562x.406	23D82601A29
70	15	−10+150	1.062x.406	23D82601A32
100	6	−10+150	.750x.375	23D82601A12
100	10	− 0+100	1.062x.375	23D82601A21
100	20	−10+150	1.062x.406	23D82601A25
100	25	− 0+ 60	1.312x.406	23D82601A19
100	25	−10+150	1.375x.375	23D82601A09
100	35	−10+150	1.62 x.421	23-82077C01
100	40	−10+150	1.375x.687	23-82077C19
100	150	−10+100	1.625x.765	23-82077C15
250	35	−10+150	1.62 x.765	23-82077C10
300	3	−10+150	1.312x.406	23D82601A27
300	6	−10+150	1.375x.375	23D82601A18
300	20	−10+150	1.12 x.765	23-82077C05
600	25	−10+150	1.687x.765	23-82077C18
1000	15	−10+150	1.62 x.890	23-82077C04
1000	20	−10+150	1.625x.765	23-82077C21



TWIST PRONG ELECTROLYTICS

Motorola supplies only the formed-plate type of electrolytic capacitor, which is noted for its higher quality, longer life. Only two suppliers are able to meet our specifications consistently for units that will operate under elevated and low temperatures and vibration — characteristics required for communication service. All models hermetically sealed in aluminum cases for long life.

SINGLE SECTION ELECTROLYTICS

Cap. Mfd.	DC Volts	Size	Part No.
10	450	⅞x2	23K82394A01
13	375	27⁄32x1½	23-82394A10
25	450	1x2	23K868705
40	450	1x2½	23-83093G06
44	25	⅞x2	23D82394A05
60	450	1x3	23-83093G01
75	250	1x2	23D82304B28
100	250	1x2½	23D82304B08
200	450	1⅜x4½	23-83093G07
300	60	1x2	23-83093G08
300	150	1⅜x3	23K833408
300	150	1⅜x3	23D82304B15
350	150	1⅜x2	23D82304B21
400	25	⅞x2	23D82394A04
450	35	1 7⁄64x1½	23-82394A11
500	25	1 1⁄16x1½	23-82394A13
500	25	⅞x2	23D82394A06
500	25	1x2	23-83093G12
500	50	1x2	23D82304B10
500	50	1x2	23D82304B02
500	50	1⅜x2	23K864206

Cap. Mfd.	DC Volts	Size	Part No.
600	50	1 3⁄32x2	23-82394A12
750	25	1x2	23D82607D04
1000	25	1⅜x2	23B82304B01
1000	50	1⅜x2	23D82304B09
1000	100	1⅜x3	23D82304B17
1125	20	1⅛x2	23D82394A02
1350	50	1⅜x2½	23D82304B06
1500	25	1x2½	23C82304B03
1500	50	1⅜x3	23C82304B07
1500	50	1⅜x2½	23D82304B26
1750	25	1 7⁄64x1½	23-83093G18
2000	35	1⅜x3½	23D82304B12
2000	100	1 15⁄32x5	23-83093G21
2800	50	1⅜x4½	23-83093G04
3000	25	1⅜x2½	23D82304B14
3000	25	1⅜x2½	23D82304B25
3400	35	1⅜x2½	23D82304B22
3500	35	1⅜x3	23-83093G09
4000	25	1⅜x3½	23D82304B24
5000	35	1⅜x4½	23D82304B16

DUAL SECTION ELECTROLYTICS

Cap. Mfd.	DC Volts	Size	Part No.
1	400	1x2	23D82125B05
10	400		
10	375	1x2	23-82393A04
10	375		
10	450	1 1⁄16x1 9⁄16	23-82393A06
10	375		
10	400	1x2	23D82125B01
10	400		
13	375	1x1½	23D82125B17
13	375		
10	400		
15	300	1x2	23D82125B09
15	300		
15	300	1x2	23D82125B10
30	300		
15	350	1x3	23K890493
50	350		
25	450	1x3	23K474081
15	450		
25	450	1x3	23D82125B14
25	450		
20	25		
40	475	1x3	23K800111
10	425		

Capacitors

DUAL SECTION (Continued)

Cap. Mfd.	DC Volts	Size	Part No.
40 40	250	1x3	23K832468
40 20	150 150	1x2	23K832217
50 30	300 300	1x3	23D82125B08
50 50	450 450	1⅜x3	23-82125B25
50 500	25 25	1⅜x2	23D82125B11
100 50	450 450	1⅜x4	23D82125B21
100 100	25 25	1x2	23D82125B06
125 125	75 75	1x2	23D82125B13
200 200	250 250	1⅜x3	23D82125B18
200 300	60 60	1x4	23-82125B24
500 130	25 25	1⅜x2	23D82125B15
500 200	75 75	1⅜x2½	23D82125B16
500 1000	20 20	1⅜x2	23K868912
750 750	50 50	1⅜x4	23D82125B03
750 750	25 25	1x2½	23D82125B07
800 300	50 50	1⅛x2	23D82393A05
1000 1000	25 25	1⅜x4	23K855689
1000 1000	15 15	1⅜x4	23K834325
1000 1000	35 35	1x2½	23-82784E01
2100 150	30 25	1x3½	23D82125B22
2500 2500	10 10	1⅜x3	23D82125B04
2750 2500	4 3	1⅜x2½	23K802998

TRIPLE SECTION ELECTROLYTICS

Cap. Mfd.	DC Volts	Size	Part No.
1.5 5 10	450 450 450	1x2½	23D82178B06
10 10 20	450 450 25	1x2	23K892117
15 15 10	450 450 450	1x3	23K890002
15 15 10	450 450 450	1x3	23D82607D01
15 15 10	400 400 400	1x3	23K838468
15 10 20	400 350 150	1x3	23K803333
15 15 20	250 250 25	1x2	23K81256
15 15 500	250 250 10	1x2	23D82003C01
15 15 500	250 250 4	1x2	23K859125
20 20 20	150 150 150	1x2	23K892116
20 20 20	400 400 25	1x3	23K75429
25 25 25	250 250 250	1x3	23K821735
30 30 20	350 300 25	1x3	23K803335
30 30 10	300 300 300	1x3	23K859055
40 40 10	450 450 450	1⅜x3	23K822729

TRIPLE SECTION (Continued)

Cap. Mfd.	DC Volts	Size	Part No.
40 40 40	450 450 450	1⅜x4	23K821734
50 50 40	250 250 250	1⅜x2½	23D82178B02
50 50 30	450 300 300	1⅜x3	23K825606
50 50 30	400 300 300	1⅜x3	23K838467
750 600 60	35 35 35	1x2½	23W82178B04
1000 100 100	60 60 60	1⅜x3	23D82178B07
1500 500 50	25 25 25	1½x2	23K868706

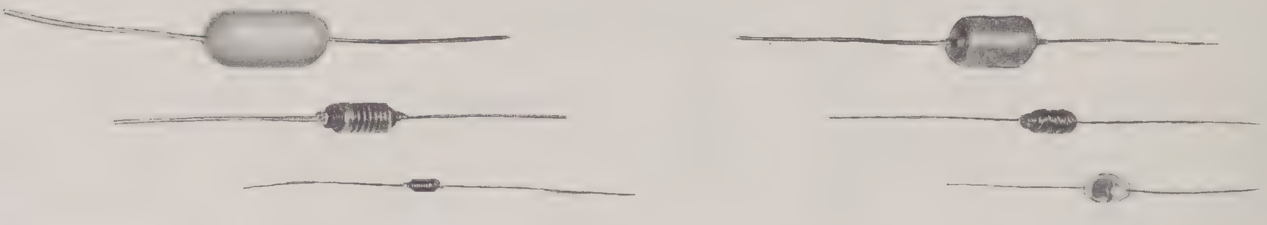
QUADRUPLE SECTION ELECTROLYTICS

10 25 25 25	450 50 50 50	1½x2	23K800110
50 10 50 25	450 450 300 300	1⅜x3	23K851506
50 40 30 10	350 350 350 350	1½x3	23K821665
80 50 30 20	300 425 425 425	1⅜x4	23D82616E01
50 50 200 200	450 450 75 75	1⅜x4	23D82616E02

Electrolytic Capacitors listed in order of value

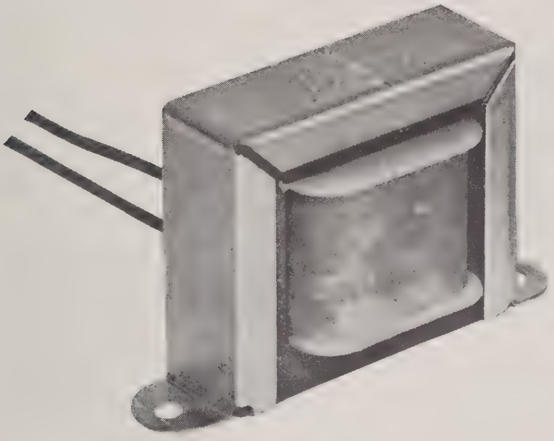
CAP. MFD.	TOL. %	DC WKG VOLTS	TYPE & FIG.	PART NO.
.022	±10	6	Tant. B	23D82397D13
.056	±10	35	Tant. A	23D82397D10
.068	±10	35	Tant. B	23D82397D11
.082	±10	20	Tant. A	23D82397D14
.1	±10	35	Tant. A	23D82397D26
.15	−20 +40	35	Tant. A	23D82397D08
.12	±10	20	Tant. A	23D82397D12
.12	±20	35	Tant. A	23D82397D20
.22	±20	20	Tant. A	23D83441B06
.22	−20 +40	35	Tant. A	23D82397D06
.27	±10	20	Tant. A	23D82397D25
1	−10 +150	250	Alum. C	23D82601A16
1	−10 +100	200	Alum. C	23C82054G01
1	±20	50	Tant. E	23D82783B10
1	−10 +150	25	Alum. C	23D82601A30
1.0	±20	6	Tant. A	23D83441B05
1.5	±10	20	Tant. A	23D82397D27
1.75	−15 +75	125	Tant.	23K878557
2	−10 +150	25	Alum. C	23D82601A34
2	−10 +250	25	Alum. C	23D82601A04
2	−10 +150	25	Alum. C	23D82601A20
2	−20 +40	8	Tant. A	23D82397D19
2	−20 +40	8	Tant. B	23D82397D32
2	−15 +50	3	Tant. E	23C82048D05
2.2	±20	6	Tant. A	23D83441B04
3	−10 +150	100	Alum. C	23D82601A15
3	−10 +10	25	Alum. C	23D82645A01
3.3	±20	20	Tant. A	23D82397D28
4.7	±20	35	Tant. E	23D82783B11
4.7	±20	25	Tant. E	23K865137
4.7	−20 +40	3	Tant. A	23D82397D05
5	−10 +50	350	Alum. D	23K837929
5	−10 +50	350	Alum. D	23K874428
5	−10+150	300	Alum. C	23D82077C02
5	−10 +100	250	Alum. C	23D82601A14
5	−10 +50	250	Alum. D	23K824135
5	−15 +100	150	Alum. D	23K844461
5	−10 +100	50	Alum. C	23K867671
5	−10 +100	25	Alum. C	23K867670
5	−10 +33	25	Alum. C	23D82601A11
5	−10 +100	25	Alum. C	23D82601A22
6.8	±20	20	Tant. A	23D82397D23
6.8	−20 +40	10	Tant. A	23D82397D09
10	−10 +50	450	Alum. D	23K837903
10	−10 +50	450	Alum. D	23D82394A01
10	−10 +100	300	Alum. C	23C82077C06
10	−10 +100	50	Alum. C	23C82054G03
10	−15 +75	25	Tant. E	23K859299
10	−10 +100	25	Alum. C	23K868502
10	±20	20	Tant. B	23D82397D31
10	−10 +150	20	Alum. C	23D82601A23
10	±20	20	Tant. A	23D82397D15
10	±20	6	Tant. A	23D82397D03
10	−15 +50	2	Tant. E	23C82048D02
10	±20	1.5	Tant. B	23D82397D22
15	−10 +100	150	Alum. C	23D82601A17
15	±20	25	Tant. E	23K865136
15	−10 +150	25	Alum. C	23D82601A31
15	±20	35	Tant. E	23D82783B33
15	±20	20	Tant. A	23D82397D17
15	−15 +75	15	Tant. E	23C848633
15	±20	15	Tant. A	23D82397D04
15	−0 +200	10	Alum. C	23K858677
16	−10 +33	10	Alum. C	23D82601A10
20	−10+30	25	Alum. C	23D82601A38
20	−10 +50	350	Alum. D	23K483459
20	−10 +50	350	Alum. D	23B836527
20	−0 +100	25	Alum. C	23D82601A03
22	±10	25	Tant. E	23K867384
22	±20	15	Tant. A	23D82397D16
22	±20	35	Tant. E	23D82783B32
25	−10 +100	100	Alum. D	23K839917
25	−10 +150	50	Alum. C	23D82601A08
25	−25 +100	50	Alum. Spcl.	23B834588
25	−10 +100	50	Alum. D	23K850516
25	−10 +150	25	Alum. C	23D82645A03
25	−10 +100	25	Alum. D	23K483807
25	−10 +150	25	Alum. C	23D82601A01
25	−10 +150	20	Alum. C	23D82601A26
25	−10 +100	15	Alum. C	23C82054G04
30	−10 +100	350	Alum. D	23K837743
33	±20	25	Tant. E	23D82783B07
33	±20	10	Tant. A	23D82397D18
33	±20	6	Tant. A	23D82397D01
35	−10 +100	100	Alum. C	23D82601A13
39	±10	10	Tant. E	23D82783B36
47	±20	6	Tant. E	23K868446
47	±20	6	Tant. B	23D82397D30
47	±20	6	Tant. A	23D82397D21
47	±20	2	Tant. A	23D82397D02
47	±20	25	Tant. E	23D82783B37
50	−10 +100	32	Alum.	23K831647
50	−10 +150	25	Alum. C	23D82601A05
50	−10+150	35	Alum. C	23D82601A36
50	−10 +150	20	Alum. C	23D82601A24
60	−10 +100	150	Alum. D	23C82341B01
60	−10 +150	50	Alum. C	23D82601A06
60	−10 +150	50	Alum. C	23D82601A29
60	−10 +100	25	Alum. D	23K863877
60	−10 +150	25	Alum. C	23D82601A07
60	−10 +150	15	Alum. C	23D82601A02
60	−10 +150	15	Alum. C	23D82601A28
68	±10	15	Tant. E	23K865594
70	−10 +150	15	Alum. C	23D82601A32
100	−10 +100	150	Alum. D	23K874702
100	−10 +150	40	Alum. C	23D82077C19
100	−10 +100	150	Alum. C	23D82077C15
100	−10 +150	35	Alum. C	23C82077C01
100	−0 +100	35	Alum. C	23K867444
100	−15 +30	30	Tant.	23K870747
100	−15 +75	30	Tant. E	23K864025
100	−15 +100	25	Alum. D	23K892549
100	−10 +150	25	Alum. C	23D82601A09
100	±20	25	Tant. E	23D82783B04
100	−0 +60	25	Alum. C	23D82601A19
100	±10	10	Tant. E	23K864366
100	−0 +100	10	Alum. C	23K864897
100	±20	10	Tant. E	23D82783B05
100	−0 +100	10	Alum. C	23D82601A21
100	−10 +150	6	Alum. C	23D82601A12
125	−10 +100	18	Alum. D	23K840707
150	−0 +200	12	Alum. C	23K867505
150	±20	6	Tant. E	23D82783B09
150	−0 +200	3	Alum. C	23K864898
250	−10 +150	35	Alum. C	23D82077C10
250	−10 +100	15	Alum. D	23K832467
300	−10 +150	20	Alum. C	23C82077C05
300	−10 +150	6	Alum. C	23D82601A18
300	−10 +150	3	Alum. C	23D82601A27
422	−10 +150	+25 −12	Alum. Spcl.	23D82607D03
600	−10 +50	25	Alum. Spcl.	23K868779
600	−10 +150	25	Alum. C	23D82077C18
1000	−10 +150	20	Alum. C	23D82077C21
1000	−10 +150	15	Alum. C	23C82077C04
3450	−10+75	75	Alum. Not Shown	23D82464C04
4000	−10+100	100	Alum. Not Shown	23D82464C01
13100	−10±75	40	Alum. Not Shown	23D82464C06
15000	−10±75	60	Alum. Not Shown	23D82464C03
25000	−10±75	40	Alum. Not Shown	23D82464C02

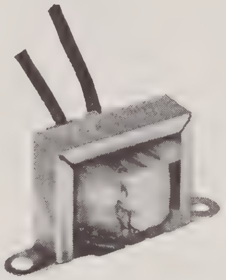
Chokes



R-F Chokes in order of inductance

INDUCTANCE	PART NUMBER	COLOR CODE
.035 uh	24C82542E02	
.065 uh	24C82542E03	
.092 uh	24C82542E06	
.13 uh	24C82542E04	
.153 uh	24K824998	
.176 uh	24B858989	
.176 uh	24C82542E05	
.2 uh	24D82723H11	Brn-Brn
.25 uh	24K821659	
.288 uh	24B82613G01	Grn-Vio
.29 uh	24-82723H04	Red
.29 uh	24-82723H20	Red (Shrink Sleeved)
.29 uh	24C82835G27	
.31 uh	24C82000E04	
.31 uh	24C82000E08	
.31 uh	24C82542E01	
.32 uh	24A868511	Red-Red
.32 uh	24C82000E05	
.33 uh	24D82190C11	Grn
.37 uh	24D82190C13	Vio
.41 uh	24C82000E22	Yel
.41 uh	24D82723H05	Yel
.45 uh	24D82190C14	Yel
.5 uh	24A847870	Grn
.5 uh	24K859167	Grn
.5 uh	24V80900A34	Grn
.82 uh	24B840512	Vio
.82 uh	24C82835G13	
1 uh	24K861264	Blk-Blk
1 uh	24C82592D03	Blk-Red
1.0 uh	24C82835G14	
1.02 uh	24V80900A86	Brn-Vio
1.2 uh	24D859162	Blk
1.2 uh	24-891309	
1.2 uh	24C82000E09	
1.2 uh	24C82000E21	
1.2 uh	24C82190C10	
1.2 uh	24D82723H01	
1.3 uh	24K865115	Blk-Grn
1.3 uh	24C82835G15	
1.5 uh	24K848119	
1.5 uh	24K867322	Brn-Blu
1.5 uh	24C82592D04	Brn-Grn
1.5 uh	24C82835G02	
1.5 uh	24-82835G04	Brn-Grn-Gold
1.7 uh	24K861208	Wht
1.7 uh	24K867323	Brn-Vio
1.7 uh	24C82835G12	
1.85 uh	24A813612	
1.85 uh	24K864764	Blk-Org
1.85 uh	24C82835G06	
2.15 uh	24K824997	
2.2 uh	24C82835G09	
2.6 uh	24C82835G01	
2.6 uh	24C82835G03	
2.6 uh	24C82835G08	
2.6 uh	24-82723H19	Red-Gold-Blu
2.62 uh	24A835457	Blu
2.62 uh	24K859672	Blu
2.62 uh	24K867320	Brn-Yel
3.1 uh	24K859165	Org
3.1 uh	24C82190C09	
3.5 uh	24C82835G11	
3.7 uh	24A821711	Grn
3.7 uh	24K867321	Brn-Grn
3.7 uh	24C82835G21	
4 uh	24A840728	Red-Blk
4 uh	24K868885	Red-Blk
5.6 uh	24K859164	Red
5.6 uh	24K859166	Yel
5.6 uh	24C82001E02	Yel
5.6 uh	24C82190C04	Yel-Vio
5.6 uh	24C82835G22	
5.7 uh	24V80901A63	Blk-Red
6.2 uh	24D82723H06	Blue
6.6 uh	24K890714	Wht
6.8 uh	24K868920	Red-Brn
6.8 uh	24D82480B03	Red-Grn
9 uh	24B847920	Brn-Red
9 uh	24C82000E03	Brn-Red
9.3 uh	24C82835G20	
10 uh	24D82549D25	
10 uh	24D82723H07	Vio
10.4 uh	24C82000E01	Yel-Org
10.4 uh	24C82001E01	Org-Yel
10.5 uh	24D859163	Brn
10.5 uh	24V80901A23	Brn
10.8 uh	24K840776	Yel-Grn
11 uh	24K855725	
11 uh	24C82000E20	
11.7 uh	24K840775	Blk-Wht
11.7 uh	24C82592D02	Blk-Wht
12.4 uh	24K868709	Brn-Wht
12.4 uh	24V80900A14	Brn-Wht
14 uh	24-82723H23	Org
15 uh	24D82549D01	
15 uh	24D82549D24	
16.0 uh	24V80900A42	Red-Yel
16.0 uh	24D82480B02	Red-Yel
16.6 uh	24K865931	Yel
23 uh	24C82000E23	Grn
23 uh	24D82723H03	Grn
23 uh	24-82723H16	Red-Red
23.2 uh	24K865405	
24.8 uh	24D82480B04	Red-Blu
26.3 uh	24K861466	Org-Yel
31 uh	24C82190C02	Org-Brn
33 uh	24K854314	
33 uh	24C82000E06	
33.0 uh	24C82835G23	
40 uh	24A891398	
51 uh	24K865495	Red-Grn
67.6 uh	24B82166B01	
67.6 uh	24D82480B01	Red-Org
71.0 uh	24C82835G26	
75 uh	24D82723H14	Vio-Blue
75 uh	24D82723H15	Vio-Grn
82 uh	24K861207	Vio
85 uh	24D82723H12	Gray
85 uh	24R82723H13	Gra-Grn
85 uh	24-82723H18	White
100 uh	24K865116	Blk-Blu
100 uh	24C82592D01	Blk-Blu
141 uh	24B847911	Grn
148 uh	24C82190C07	
186 uh	24B847912	Red
242 uh	24K865494	Brn-Red
390 uh	24D82549D02	
620 uh	24K847940	Brn-Org
620 uh	24A864737	Blk-Brn
620 uh	24V80900A61	Brn-Org
700 uh	24K867319	Brn-Org
1200 uh	24K865157	Blk-Vio
1200 uh	24C82000E12	
1200 uh	24C82835G18	
1800 uh	24C82190C01	
2000 uh	24K865114	Blk-Yel
2000 uh	24V80900A74	Org-Vio
2000 uh	24C82190C03	Org-Vio
2830 uh	24K861467	Yel-Yel
3100 uh	24A85541	Org
4000 uh	24B840729	
5700 uh	24K847941	Brn-Yel
5700 uh	24K864763	Blk-Red
5700 uh	24C82000E02	Brn-Yel
5700 uh	24C82835G05	
5700 uh	24C82835G16	
6000 uh	24K483466	Blu
11000 uh	24C82835G19	

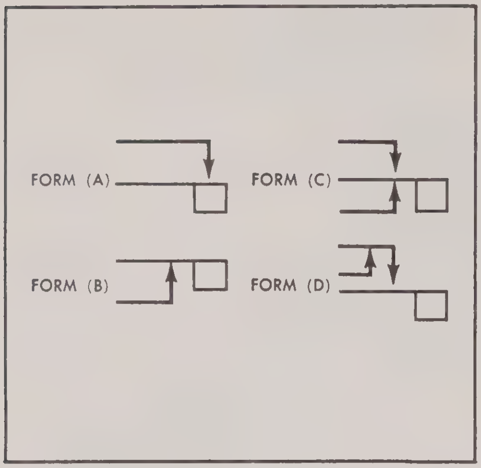




The following listing contains commonly used chokes in Motorola Communications Equipment. The chokes are listed in order of inductance. Current capacity, DC Resistance & sizes are also listed. For prices, refer to numerical part price listing in back of this catalog.

INDUCTANCE	TYPE	CURRENT	OHMS	DIMENSIONS	PART NUMBER
.0123MH	Filtr	1.8 ADC	0.35	1.62 X1.00X0.82	25B82583A01
0.045MH	Hash	NO 11 GA	0.012	0.89 Dia X2.10	25B861375
0.2MH	Hash	NO 20 GA	0.15	0.71 Dia X1.50	25A82391A01
0.3MH	Audio	0MADC	0.066	0.80 X0.80X0.66	25B83280G01
0.3MH	Hash	4.5 ADC	0.066	0.88 Dia X1.75	25C82180B01
1.6MH	Filtr	200MADC	0.43	0.55 X0.41X0.48	25C83127G01
1.7MH	Audio	0MADC	0.2	1.06 X0.90X0.88	25C82003F01
2.5MH	Audio	250MADC	1.0	0.80 X0.63X0.66	25B82815D01
5 MH	Audio	0MADC	1.8	0.80 X0.73X0.66	25B82142H01
7.6MH	Filtr	10 ADC	0.055	4.50 X3.75X3.75	25C82916A01
10 MH	Audio	70MADC	10	0.56 X0.50X0.50	25B82719A02
12 MH	Filtr	60MADC	3.2	0.37 X0.36X0.37	25B82035D01
20 MH	Filtr	3.0 ADC	0.43	4.00 X2.43X2.59	25C82599E01
35 MH	Filtr	250MADC	12	0.81 X0.68X0.68	25C82379A01
35 MH	Filtr	265MADC	12	0.81 X0.56X0.70	25C83124C01
40 MH	Filtr	4.0 ADC	0.4	4.12 X3.43X2.56	25C82467C01
40.1MH	Filtr	200MADC	6	1.50 X0.80X0.81	25C82227G01
45 MH	Filtr	210MADC	30	0.82 X0.68X0.68	25B82348A01
60 MH	Audio	20MADC	20	0.56 X0.50X0.50	25B82719A01
65 MH	Audio	0MADC	6	0.38 X0.38X0.25	25B82169D01
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A02
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A03
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A04
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A05
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A06
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A07
70 MH	Audio	75MADC	8	0.80 X0.73X0.66	25C82878A08
70 MH	Audio	75MADC	8	1.80 X0.73X0.66	25C82878A10
70 MH	Audio	75MADC	8	1.26 X0.73X0.66	25C82878A09
70 MH	Filtr	1.0 ADC	2	1.88 X1.80X2.25	25C83422B01
80 MH	Filtr	800MADC	0.54	2.37 X2.50X3.03	25C864209
90 MH	Audio	1MADC	60	0.67 X6.25X0.78	25B82738C01
100 MH	Audio	4MADC	CT	1.75 X1.03X1.43	25B82122F01
100 MH	Filtr	300MADC	20	1.82 X1.15X1.46	25B859538
100 MH	Filtr	250MADC	12	2.06 X1.25X1.22	25C82063G01
111 MH	Filtr	300MADC	9.6	1.82 X1.15X1.46	25B83849A01
160 MH	Filtr	70MADC	20	0.80 X0.55X0.68	25C83390B01
200 MH	Filtr	300MADC	3	3.25 X1.56X1.94	25C82491E01
250 MH	Filtr	190MADC	63	1.62 X0.81X0.81	25C82038D01
300 MH	Filtr	300MADC	63	1.06 X0.81X0.81	25C82380A01
300 MH	Filtr	300MADC	63	1.06 X0.81X0.81	25C82380A02
300 MH	Filtr	1.0 ADC	0.45	2.37 X2.48X3.03	25C811355
340 MH	Audio	7.0MADC	75	0.37 X0.34X0.38	25-83564D01
340 MH	Audio	7.0MADC	75	0.37 X0.34X0.38	25B83564D02
500 MH	Audio	0MADC	145	0.50 DIA X0.85	25C82816D01
500 MH	Filtr	60MADC	250	0.82 X0.82X0.68	25B82349A01
500 MH	Filtr	40MADC	185	1.31 X0.68X0.68	25B82803C01
700 MH	Audio	0MADC	200	0.26 X0.34X0.38	25B82872B01
700 MH	Audio	0MADC	200	0.26 X0.34X0.38	25B82872B02
700 MH	Audio	0MADC	46	0.26 X0.34X0.37	25B82915G01
900 MH	Strap	300MADC	41	3.29 X1.62X2.12	25C83253G02
.01 HY	Filtr	1.6 ADC	0.9	2.81 X1.21X1.68	25-832466
1.0 HY	Filtr	200MADC	50	2.81 X1.68X1.71	25C82763C01
1.5 HY	Filtr	65MADC	50	1.70 X1.46X1.37	25-82189H02
1.5 HY	Audio	8MADC	400	0.56 X0.40X0.47	25B82751D01
1.7 HY	Filtr	120MADC	128	2.40 X1.50X1.38	25B82968E01
2.1 HY	Filtr	100MADC	134	1.70 X1.46X1.37	25C82376E01
2.1 HY	Filtr	200MADC	70	3.71 X2.12X2.31	25C82478E01
2.1 HY	Filtr	100MADC	128	2.37 X1.50X1.37	25K837416
2.1 HY	Filtr	200MADC	70	3.71 X2.12X2.31	25-82804H01
2.3 HY	Filtr	100MADC	112	2.81 X1.56X1.68	25C825358
2.45 HY	Filtr	80MADC	50	2.09 X2.18X2.71	25K87302
3.5 HY	Filtr	370MADC	81	2.62 X3.56X3.12	25C82798E01
3.5 HY	Filtr	270MADC	48	2.62 X3.25X3.12	25C83962A01
4.0 HY	Audio	0MADC	1470	0.50 DIA X0.85	25C82816D02
5.0 HY	Audio	0MADC	420	0.51 X0.41X0.48	25C82190A01
5.0 HY	Audio	0MADC	420	0.55 X0.36X0.48	25C82750D01
6.0 HY	Audio	0MADC	1650	0.50 DIA X0.5)	25C82498H01
6.0 HY	Audio	0MADC	1650	0.50 DIA X0.85	25C82867C01
6.0 HY	Audio	0MACA	6	1.31 X0.66X0.53	25D850637
6.0 HY	Audio	0MADC	Not Spec.	0.81 X0.56X0.62	25-847527
6.0 HY	Filtr	100MADC	142	3.00 X2.56X4.25	25C821999
7.0 HY	Audio	0MADC	560	0.51 X0.41X0.48	25C82190A02
7.0 HY	Audio	0MADC	560	0.55 X0.36X0.48	25C82750D02
15 HY	Filtr	250UADC	190	0.76 X0.62X0.62	25C82448C01
15 HY	Filtr	5MADC	1000	1.06 X0.77X0.81	25B82025D01
15 HY	Filtr	420MADC	100	5.91 X5.37X6.00	25C82743H01
15 HY	Filtr	365MADC	100	5.91 X5.37X6.00	25C82743H02
15 HY	Filtr	250UADC	190	1.29 X0.62X0.62	25C82448C02
80 HY	Audio	20MADC	3600	2.12 X1.89X2.81	25A806341

Telephone Type Relays



All relays are dc types except where indicated.

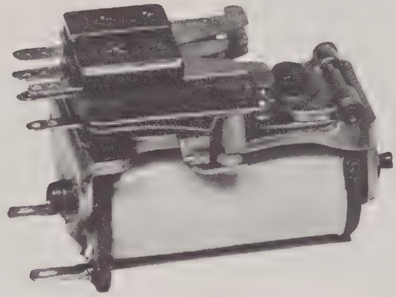


Fig. 1 Large Telephone

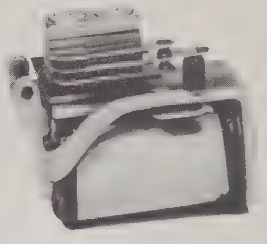


Fig. 2 Small Telephone

VOLTAGE RELAYS

OPERATING VOLTS	CONTACT FORMS	COIL RESISTANCE	PART NUMBER	FIG.
4	5A3C	50	80-82178C01	1
4.5	4A1C	19	80-82457E01	2
6	1A3C	19	59-891430	1
6	4A1C	19	80-831612	1
6	3A1B	19	80-832018	1
6	2A3C	19	80-837906	1
6	1A1C	17	80-844426	1
6	1A4C	50	80-850583	1
6	4A2C	50	80-851647	1
6	1A4C	50	80-858174	1
6	4C	150	80-83336A01	2
8.6	2C	280	80-82675H01	1
9	4A1B2C	100	80-863333	1
9	2A1B	80	80-863348	1
9	2A1C	100	80-82120B01	1
9	1A3C	45	80-82584H01	1
9	1A1C	65	80-82610D01	2
9	2A1B	80	80-82982D01	2
9	1A	500	80-83379B01	1
9	2A1B	350	80-83379B04	2
9	3C	80	80-83458C01	2
9	1A1B1C	80	80-83755C01	2
9	2C	75	80-83903D01	2
9	1A1B1D	80	80-84457A01	2
9.5	4C	150	80-82675H02	1
12	1A1C	75	80-848943	1
12	1A1C	65	80-855208	1
12	3A1C	100	80-858831	1
12	5A2C	100	80-858550	1
12	6A1C	20	80-82938B01	1
17	8C	300	80-83841E01	2
19	2C	2700	80-83007B01	1
35	2A1C	500	80-82335E01	2
42	1A1C	8000	80-837948	1
117VAC	1A4C	300	80-867801	1

CURRENT RELAYS

OPER. CURRENT IN MA.		CONT. FORM	COIL REST.	PART NUMBER	FIG.
IN	OUT				
1.4	.7	1A	26000	80-82672A01	2
3.5	1.5	3C	14000	80-841443	1
3.5	.5	1A1C	14000	80-859026	1
4.5	2.2	1A1C	14000	80-850430	1
5.5	2	3A2C	10000	80-848192	1
6	3.6	2A1C	5000	80-844986	1
6.5	3	6A1C	10000	80-848193	1
7.5	4	2A1C	6500	80-831474	1
7.5	4.5	1C	2700	80-858203	1
7.7	5.8	1C	2000	80-82639H01	2
7.7	5.8	1C	2000	80-82639H01	1
8	4	2A2G	6500	59-81303	1
10	5	2A3C	1400	59-82985	2
12	5	7C1D	6500	59-82744	2
13	6	1A	1000	80-855814	1
13	8	2C	1300	80-83948B02	1
15.5	5.5	2C	1000	80-855815	1
24	16	1A2C1D	850	80-848878	2
24	*	6C	1200	80-82620H01	2
30	*	4C	500	80-82328E07	1
36	12	3C	350	80-848880	2
47	41	1B	47	80-82142B02	1
150	*	3C	25	59-837012	1
150	*	4C	25	59-880578	1

*Not specified

HIGH QUALITY MOTOROLA VIBRATORS

5-pak, vibrators

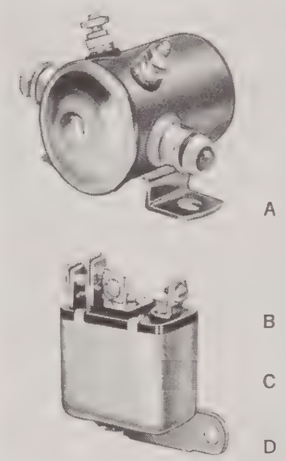
Motorola vibrators are designed for optimum service life and must meet mechanical and electrical specifications that provide long, uninterrupted usage, even when subjected to severe shock and vibration or extreme temperature conditions. Ordering by the 5-Pak carton (unassorted) provides handy storage, simplifies inventory.

PART NO.	VOLTS	CYCLES	TYPE	PIN BASE	SIZE IN INCHES
48B 800145	6	95	INT	6	1½ x 2⅞
48B 803700	6	115	SYN	7	1½ x 2⅞
48C 847730	6/12	95	INT	7	1½ x 2⅞
48B 880261	6	115	INT	4	1½ x 2⅞

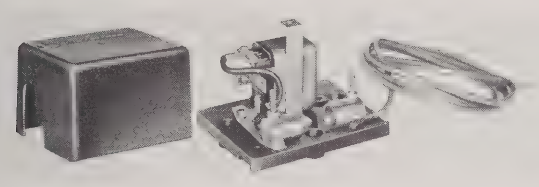
"A" POWER RELAYS

PART NO.	FIG.	COIL RATING VOLTS	COIL RATING OHMS	CONT AMP	TYPICAL APPLICATION
*59C 483057	A	6	4.5	80	Dynamotor relay, also used as under hood "A" power relay.
*59K 851519	A	12	22	80	Slightly longer than above, used as under hood "A" power relay.
59K 825038	A	12	18	100	Dynamotor relay.
59K 880283 59K 813674	B	6 12	22 85	30 30	Universal under hood "A" power relay for most mobile installations.
59D 84712	C	6	22	30	Similar to "B" except for vertical chassis mtg.
59K 858479 59K 858480	D	6 12	19.8 76.5	30 30	Similar to "B" except has brkt. for mounting in bakelite fuse-relay assemblies shipped with TKN 6000 series cable kits on late type units.

* Low Temp. Continuous Duty Coil.

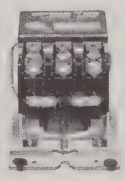


RELAY AND FUSE BOX ASSEMBLIES



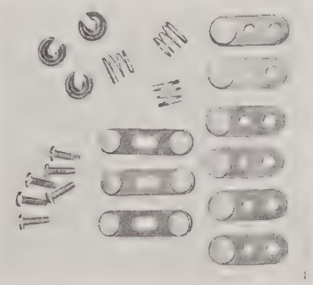
PART NO.	DESCRIPTION
1V 859440 (6 or 12 volt)	Consists of a 6 volt horn relay and built-in dropping resistor. Can be used on 6 or 12 volt vehicles by proper placement of shorting jumper. Supplied with 5 feet of #4 cable for connection to the battery. Uses 3" x ¾" size fuses. (30 to 60 amp.)
1V 859445 (12 volt)	Similar to above except supplied with a 12 volt horn relay, 5 feet of #10 battery cable and uses 2" x 9/16" fuses. (Up to 30 amp.)

SK 9464 RELAY KIT



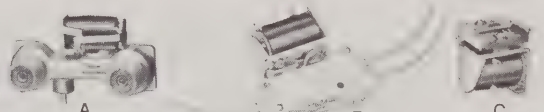
SK 9464 Relay Kit Contains 1-80C 847700 heavy duty contactor relay, jumpers and instructions for replacement of earlier relays (891442 & 804637)

REPLACEMENT RELAY CONTACTS



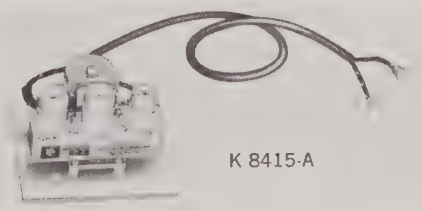
PART NO.	USAGE
39K 863660	Contact kit for 59C 847700 plate contratctor relay (AH&H Relay only)
39K 837336	Contact kit for 59B 891442 & 59B 804637 plate contactor relays

ANTENNA RELAYS


A 59C 85312
B 80C 82762A02
C 59B 800031

PART NO.	FIG.	COIL RATING NOM. VOLTS	COIL RATING OHMS	APPLICATION
59C 483605 Replaces 59-85312	A	6	15	All "Sensicon" & "A" type transmitter strips. Rated 100W RF.
80C 82762A02	B	12	75	U44 series 10" housing 450-470MC. Rated 150W RF.
80A 82762A12	B	12	75	450-470MC "Motrac" radio.
80-82762A17 Replaces 80-82762A01	B	12	75	"Motrac" radio; Rated 150W RF; Neg./Pos. Gnd.
59B 800031	C	6	30	"Unichannel" transmitter. Rated 30W RF.
59K 842298	C	6	30	6/12V "G" transmitter. Rated 60W RF.
59K 854405	C	12	120	12V "G" Type transmitter. Rated 60W RF.

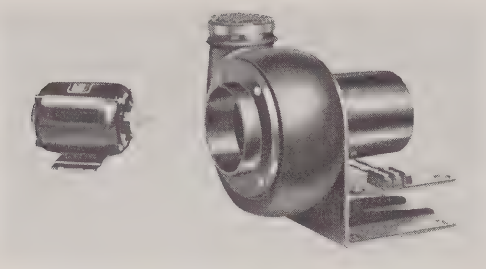
250 WATT BASE STATION RELAY REPLACEMENTS


K 8415-A

PART NO.	KIT USED ON	FREQ. RANGE
59B51750	K8232B	25 to 54 MC
80C851713	K8415A	144 to 174 MC
80K852261	TK479	450 to 470 MC

Note: Complete kits no longer available.

Blowers, Timers and Clock Motors



BLOWERS

Blower and motor complete. Supplies 200 cu. ft./minute. Used as bottom blower in 250-300 watt base station equipment.

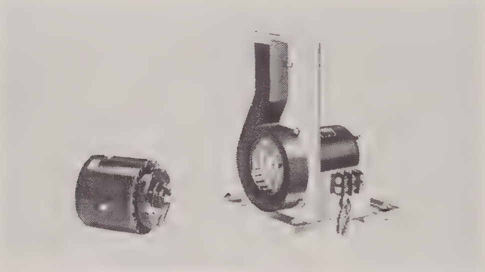
For 25-174 MHz base stations.
Order **59D 82627G01**

Replacement motor (for 59C 51448) 1550-1590 RPM 1/20HP.
Order **59K 850955**

Replacement motor (for 1V 852608) 3350 RPM 1/10HP.
Order **59C 852546**

Replacement motor as above except supplied with starting capacitor, bracket, leads with lugs, etc.
Order **1V 852609**

Replacement air filter for above blowers.
Order **64C 50430**



Blower and motor complete. Used as top blower in 250-300 watt base station equipment.

Replacement motor for P8451C (Bodine Mfg.) 3350 RPM 1/40HP. (This type does not use a starting capacitor.)
Order **59B 84636**

Complete motor assembly includes 59C 850286 motor, capacitor, bracket, leads with lugs, etc. (For P8451 series blower)
Order **1V 852178**

Consists of mounting plate and 2 shock mounts for P8451C blower.

Left hand side.
Order **1V 86766**

Right hand side.
Order **1V 86767**

Shockmounts only. (Four used per blower.)
Order **75B 82686E02**

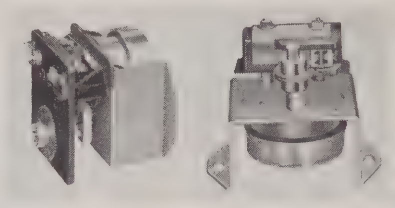
Replacement Screen and motor for TK-192 400-470 MHz transmitter. Used for final amplifier and driver cooling.

Order **59B 821730** Replacement motor only. (1/300 HP 3000 RPM.)
Order **35K 838111** Replacement screen only.

Motor and blower only. AC Motor: 3,300 RPM, single phase for communication equipment. Matched blower for continuous duty operation on 120 volt 50/60 Hz single phase line delivers 80 CFM.
Order **59-84548C01**

Filter screen for above (size 7.812″ x 7.812″.
Order **35-82754G01**

TIMERS



30-45 second timer as used in base station equipment. (110VAC/60 cycle.)
80B 82220A01

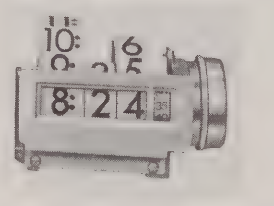
Timer adjustable to 5 minutes. (110VAC/60 cycle.)
59B 859730

Timer adjustable from 30 sec. to 30 min. indoor base station.
80-83172C01

Timer adjustable from 5 sec. to 5 min. Indoor base station.
80-83172C02

SWITCHES FOR TIMERS

TIMER PART NO.	SWITCH MFG. NO.	MOTOROLA PART NO.
59B 880516	WHBT-21-1	40K 868520
80B 863800	L3019	
	or	
	2HBT-208A-1	40K 868519
	or 2HBT-208C-1 or 2HBT-208C5	
80B 82220A01	L3001	
	or	
	2HBA-138-1	40A 82046G01
	or	
	2HBA-138G-1	
59B 859730	2HBT-208C-5	
	or	
	2HBT-61-3	40K 868519
80-83172C01	B2-R88-A2	40-84254C96
80-83172C02	90-203	40-84306A48



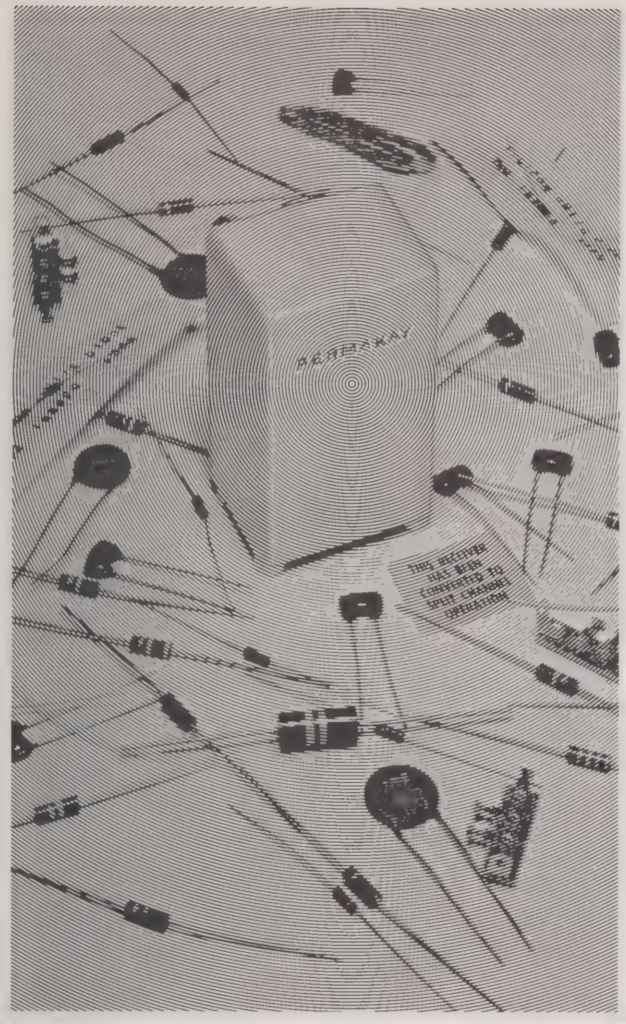
REPLACEMENT CLOCK MOTORS

50 and 60 Cycles 115 VAC

FOR CLOCK PART NO.	ORDER MOTOR PART NO.
59B474954	59K837335
72C855220	59-82759C01 Replaces 59-863490
72C861046	59A82759C01
72C82922B01	59A82759C01
72C82922BO2	59A82759C01
72C82922B03	59A82759C02 50 CPS
72C82922B04	59A82759C01
72C82922B05	59A82759C01
72C82922B06	59A82759C02 50 CPS
72C82922B07	59A82759C01
72C82922B08	59A82579C01
72C82922B09	59A82759C01
72C82922B10	59A82759C01
72C83433G01	59A82759C01
72K863996	59A82759C02 50 CPS
72A2922B11	59A82759C02
72-84216A01	59-82759C01
72-84216A02	59-82759C01
72-84216A03	59-82759C02
72-84216A04	59-82759C02

REMOVABLE CLOCK WINDOWS

These windows are designed for easy removal in order that the clock may be set for the proper time. The 61B82723D01 window was used on the early TA270 and T1200 series remotes. By cutting out the old window in the "BY" base stations the new removable window can be used. The new T1370 series and solid state "Consolettes" use the 61B83072G01 window.



Conversion Kits

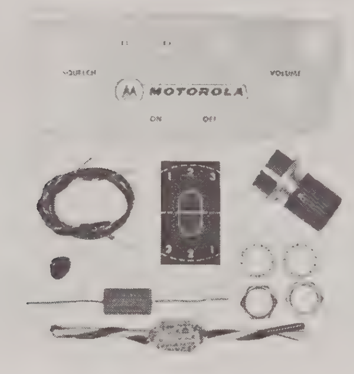
Customized system conversion kits

- Add Frequencies
- Change Voltages
- Modernize
- Extend Range
- Prevent Obsolescence
- Improve Over-all Operation

High-quality conversion kits customized to your equipment allow you to add frequencies, change voltages, bring equipment up to modern standards, extend range in fringe areas, provide solutions to obsolescence and improve operations throughout your systems.

Single Tone Equipment

For "Micor" Single-Tone Equipment, See Index



3 FREQUENCY SWITCH KITS

Installation of a 3 frequency switch kit will increase the flexibility of the system by adding 2 additional frequencies. The chart shown, lists the five standard oscillator frequencies and the second and third frequencies.

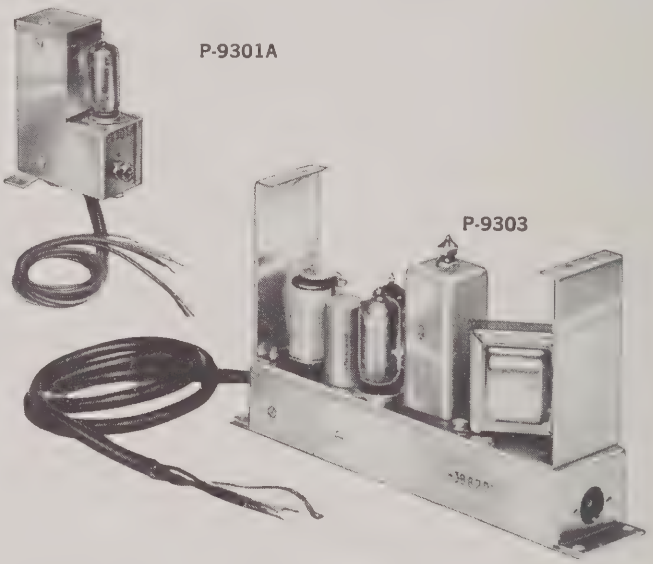
NO.	DESCRIPTION
TLN 6019A	3 frequency switch kit for all panel kits and sheet metal control heads.
TLN 6003A	3 frequency switch kit. Same components as above except has a replacement panel for new die-cast heads.

P-9301A BASIC FREQUENCY	3-FREQUENCY KIT FREQUENCY 2	3-FREQUENCY KIT FREQUENCY 3
1800 cps	2000 cps	2200 cps
1950 cps	2135 cps	2324 cps
2100 cps	2272 cps	2452 cps
2250 cps	2412 cps	2580 cps
2400 cps	2552 cps	2712 cps

*Order as P9301A Freq. required.

SINGLE-TONE DECODER AND GENERATOR

The P-9303 Single-Tone Decoder is used in conjunction with the P-9301A Single-Tone Oscillator, P-9306 Ten Button Control Box and Signal Generator, or with special versions of these sending units. Single-tone facilities can be used for selective signalling by remote control of visual or audible alarms such as found in the Civil Defense and Public Safety services or may be used in any application where a circuit closure function is needed. Signals may be sent over microwave, radio, power line carrier, telephone carrier, or systems which provide audio circuits.

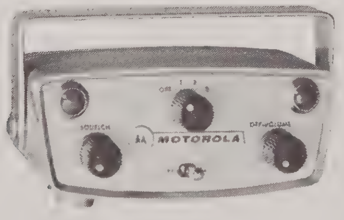


KIT NO.	DESCRIPTION
P 9301A*	Single tone generator. 1800 through 2950 cps. Specify frequency.
P 9303*	Single tone decoder. 600 to 3200 cps Specify frequency.
P 9306	Selector box, 10 freq. 1050 to 2400 in 150 cycle steps.
K 9058	Panel 19" w/hardware for mounting one or two decoders in upright type base stations.

*Stock frequencies are 1800, 1950, 2100, 2250, 2400 cps.

*Specify frequency by P9301A 1800, P9301A 2400, or P9303 1950, P9303 2250.

TRANSISTORIZED SINGLE TONE CONTROL HEADS



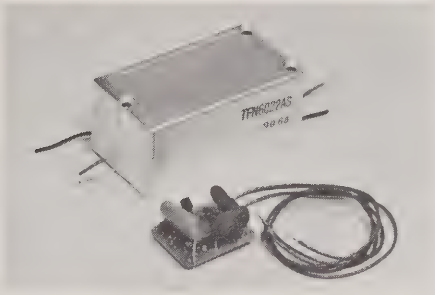
These control heads provide a selective tone for Motorola "Motrac" or Tube-Type mobile radio sets. They permit mobile to base station selective calling, or provide remote switching functions for control of standby equipment. All units with microphone connector less microphone.

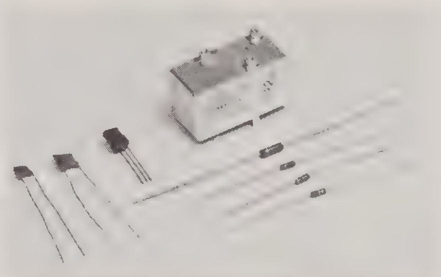
MODEL	FREQUENCIES	APPLICATION
TCN6037AE* TCN6038AE	One Three	"Motrac" ±12 volt 1-freq., carrier squelch, rear-mount radio set
TCN6038AF	Three	"Motrac" ±12 volt 2-freq., carrier squelch, rear-mount radio set
TCN6040AF	Three	Tube-Type ±6/12 volt 2-freq., carrier squelch, rear-mount radio set

NOTE: Frequency must be specified. Available from 900 to 2800 cps (1600 to 2200 cps preferred range) in minimum steps of 150 cps.
*Specify frequency by TCN6037AE 1750, TCN6037AE 1900.

See Buyers' Guide for Additional Tone Equipment.

Split Channel Conversion Kits





MOBILE AND PORTABLE CONVERSION KITS FOR 450 mc "SPLIT-CHANNEL" OPERATION

Motorola Model Series (Note 1)	Equipment Description	Conversion Kit Required
U44LHT	20 Watt "Motrac" Radio	TLN1140A
U54LHT	40 Watt "Motrac" Radio	
U64LHT	60 Watt "Motrac" Radio	
D34DRT	15 Watt Business "Dispatcher" Radio	TLN1141A
U44HHT	20 Watt "Motrac" Radio	TLN1132A
U54HHT	35 Watt "Motrac" Radio	
U44BBT	18 Watt "T-Power" Radio	TLN-1133B
H24DCN	0.7 Watt HT Series "Handie-Talkie" Radio	NEN6070A
Z14ULN	50 Milliwatt Hazardous Atmosphere "Handi-Talkie" Radio	

BASE STATION CONVERSION KITS FOR 450 mc "SPLIT-CHANNEL" OPERATION

Motorola Model Series (Note 1)	Equipment Description	Receiver Conversion Kit Required	Transmitter Conversion Kit Required	±.0002% Transmitter Channel Element Required
L44BBB	Consolette Base Station	TLN1135A	TLN1134A (Note 3)	TLN1124A (2 Required For 2 Frequency Transmitters)
C54BBB	65 Watt "Compa-Station" Base Radio			
C54BBY	65 Watt "Compa-Station" (Repeater)			
J54BBB	65 Watt Outdoor-Cabinet Station			
J54BBY	65 Watt Outdoor-Cabinet (Repeater)			
C74BBB	100 Watt "Compa-Station" Station			
C74BBY	100 Watt "Compa-Station" (Repeater)			
J74BBB	100 Watt Outdoor-Cabinet Station			
J74BBY	100 Watt Outdoor-Cabinet (Repeater)			
B44AAB (Note 4)	18 Watt Indoor-Cabinet	TLN1137A (Carrier Squelch Models) (Note 4) TLN1142B "P-L" Squelch Models (Note 4)	TLN1136A (Note 4)	When ordering, be sure to specify operating frequency.
B44AAY (Note 4)	18 Watt Indoor-Cabinet (Repeater)			
J44AAB (Note 4)	18 Watt Outdoor-Cabinet			
J44AAY (Note 4)	18 Watt Outdoor-Cabinet (Repeater)			
B94AAB (Note 4)	250 Watt Indoor-Cabinet			

NOTES: (1) For Model Series not listed, contact your nearest Motorola representative.

(2) Three-digit type numbers indicate equipment modified in the field to comply with "Split Channel" technical requirements. Four-digit type numbers indicate equipment that meets the technical standards for "Split Channel" operation as shipped from the factory.

(3) For two-frequency transmitter models it is necessary to obtain 2-48C82466H03 Silicon Diodes in addition to the TLN1134A Conversion Kit. Complete instructions for the installation of these parts are contained in the required transmitter conversion kit.

(4) The Conversion Kits listed for these models are applicable only to the following receiver and transmitter models (See Note 1):

TRANSMITTERS

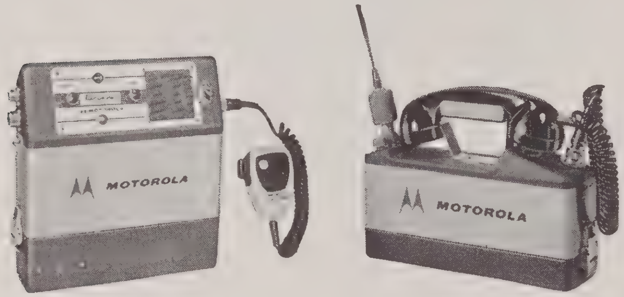
	Type	Suffix
18 Watt:	TTE1000AA/TA147	8 and up
	TTE1000 AB/TA147-CZ	8 and up
	TTE1000 AC/TA147-T	2 and up
250 Watt:	TU451 Exciter	1 and up

RECEIVERS

	Type	Suffix
Carrier Squelch:	TRE1000 AA/TA223	All 8 and up
"Private-Line" Squelch:	TRE1000 AE/TA220Z	

2-Frequency Conversion Kits

TWO-FREQUENCY CONVERSION KITS, "HANDIE-TALKIE" AND "DISPATCHER" RADIOS



"HANDIE-TALKIE" RADIOS—when converting this tube-type equipment to 2-frequency receiver operation, it is necessary to modify the power supplies to provide proper voltages for fully transistorized operation. If present 1-frequency receiver is fully transistorized or if the transmitter *only* is 2-frequency converted, power supply does not require modification.

MOTORCYCLE AND INDUSTRIAL "DISPATCHER" RADIOS—All remote control motorcycle and Industrial "Dispatcher" equipment require the PK150 relay kit. This kit requires only one lead to control the frequency relay and eliminates the need of replacing or modifying the existing control cable.

Conversion Kits for H21, H23DCN, DEN Series "Handie-Talkie" Radio

MODEL	ORDER KIT NO.	KIT DESCRIPTION
H21DCN Series (Std. Squelch only)	PK 141	**Transmitter Kit,** 2-Freq. 25-54 mc
H21DCN Series (Dual Squelch only)	PK 142	Transmitter Kit, 2-Freq. 25-54 mc
H23DCN Series (Std. Squelch only)	PK 143	Transmitter Kit, 2-Freq. 132-174 mc
H23DCN Series (Dual Squelch only)	PK 144	Transmitter Kit, 2-Freq. 132-174 mc
H21DCN Series		**Receiver Kit,**
(Std. & Dual Squelch)	PK 145L	25-30 mc
	PK 145M	30-42 mc
	PK 145H	42-54 mc
H23DCN Suffix "A"	PK 146	Receiver Kit
Suffix "B"	PK 178	2 Freq. 150.8-174 MC
H23DEN Series	PK 178	2 Freq. 150.8-174 MC
Carrier Squelch "DCN" Models	1V 80723A77	2-Freq. Housing For Telescopic Antenna Models Only
Dual Squelch "DCN" Models	1V 80724A99	
Carrier Squelch "DCN" Models	1V 80724A93	2-Freq. Housing For Rigid Loop Antenna Models Only
Dual Squelch "DCN" Models	1V 80725A03	
Carrier Squelch	PK 147	2-Freq. Switch Kit
Dual Squelch	PK 159	2-Freq. Switch Kit

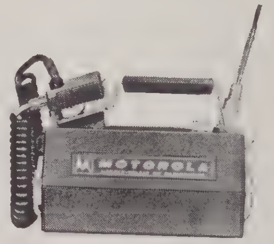
25-54 mc "Handie-Talkie" and "Dispatcher" Radio Equipment

ORDER KIT NO.	KIT DESCRIPTION
PK 136	Receiver Kit 2-Freq. 25-30 mc
or PK 137	Receiver Kit 2-Freq. 30-42 mc
or PK 138	Receiver Kit 2-Freq. 42-54 mc
PK 139	Transmitter Kit 2-Freq. 25-54 mc
PK 140	Panel Conversion Kit for Port. Equipment
or PK 132	Panel or Control Unit Kit for Industrial or Motorcycle Equipment
PK 150	2-Freq. Relay Kit. Required for Remote Control models T21, T31 Series only.

136-174 mc "Handie-Talkie" and Industrial "Dispatcher" Radio Equipment

ORDER KIT NO.	KIT DESCRIPTION
PK 135	Receiver Kit 2-Freq. 136-150.8 mc
or PK 130	Receiver Kit 2-Freq. 150.8-174 mc
PK 131	Transmitter Kit 2-Freq. 136-174 mc
PK 140	Panel Conversion Kit for Portable Equipment.
or PK 132	Panel or Control Unit Kit for Industrial or Motorcycle Equipment
PK 150	2-Freq. Relay Kit. Required for Remote Control models T23, T33 Series only.

H21, 23 DCN
SERIES

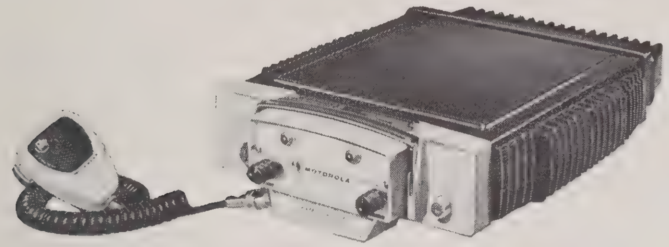


P21, 23
P31, 33 SERIES

Conversion Kits for P21, 31, 33 DDC Series "Handie-Talkie" Radiophone

EQUIPMENT	ORDER KIT NO.	KIT DESCRIPTION	
P21,31DDC	PK 148	Transmitter Kit, 2-Freq. 30-54 mc	
P23,33DDC	PK 149	.0025% Stability	Std. Squelch
	or PK 160	.0005% Stability	
	PK 161	.0025% Stability	Dual Squelch
	or PK 162	.0005% Stability	
P21,31DDC		Receiver Kit,	
	PK 145L	25-30 mc	
	PK 145M	30-42 mc	
	PK 145H	42-54 mc	
P23, 33DDC			
(Suffix "A")	PK 146	Receiver Kit	
(Suffix "B")	PK 178	2 Freq. 150.8-174 MC	
Carrier Squelch "DDC" Models	PK 151	Panel Kit, 2-Freq. includes new grille & 2-Freq. switch	
Dual Squelch "DDC" Models	PK 152		

"Motrac" and "Motran" Radio 2-Frequency Kits



ORDERING INFORMATION

(Read carefully before ordering)

Two frequency radio conversion kits include all electrical parts including transistors or tubes as required, plus necessary eyelets, wires, etc. to modify the receiver oscillator module or the transmitter exciter board to 2 freq. operation. Crystals are not included and should be ordered separately.

GROUP 1—12-volt negative ground only "Motrac" radios, identified by rear heat sink only. Includes only those "A" suffix models that use oscillator modules TLN6124A, 6125A, 6126A in 25-54 mc range and oscillator module TLN6096A in 150-174 mc range. See group 2 for "A" suffix models using other oscillator modules.

GROUP 2—±6/12-volt "Motrac" radios identified by rear heat sink, plus a heat sink added on each side. Includes 25-54 mc models ending in suffix letters "B", "C" and "Extender" models with "A" and "B" suffix. For all models using receiver oscillator modules TLN6204A, 6205A, 6206A in 25-54 mc range. Includes 150-174 models ending in suffix letters "B", "C", and "D" and other models using receiver oscillator modules TLN6217A and TLN6481A.

GROUP 3—Latest series of "Motrac" radios. Similar in appearance to Group 1. Included are all 25-54 mc models ending in suffix letter "D" and all "Extender" models ending in suffix letter "C". These models use receiver oscillator modules TLB6341A and TLB6343A. Also included are 150-174 mc models ending in suffix letter "E" using receiver oscillator modules TLN6734A and TLN6900A.

"MOTRAC" RADIO 2-FREQUENCY KITS

25-54MC

GROUP	DESCRIPTION	ORDER KIT NO.
"1"	Transmitter	PK 72
"2"	Transmitter	PK 72
"3"	Transmitter	PK 157
"1"	Receiver 25-30 mc	PK 73 & PK 74
	30-36 mc or 42-50 mc	PK 73 & PK 75
	36-42 mc or 50-54 mc	PK 73 & PK 76
"2"	Receiver 25-30 mc	PK 77 & PK 78
	30-36 mc or 42-50 mc	PK 77 & PK 79
	36-42 mc or 50-54 mc	PK 77 & PK 80
"3"	Receiver 25-36 mc	PK 155
	36-50 mc	PK 156

150-174 MC

GROUP	DESCRIPTION	ORDER KIT NO.
"1"	Transmitter	PK 81
"2"	Transmitter	PK 82
"3"	Transmitter	
	(150.8-162 mc)	PK 154
	(162-174 mc)	PK 158
"1"	Receiver	PK 83
"2"	Receiver	PK 84
"3"	Receiver	PK 153

450-470 MC

DESCRIPTION	ORDER KIT NO.
Receiver Conversion Kit	PK 172
Transmitter Conversion Kit	PK 173

"MOTRAN" RADIO 2-FREQUENCY KITS

25-50 mc and 136-174 mc receiver order **TLN 6831A**

136-174 mc transmitter order **TLN 6836A**

25-50 mc transmitter order **TLN 6838A**

Note: Above kits do not include channel elements. See crystal section for model numbers.

"MOTRAC" RADIO CABLE CONVERSION KIT—Includes a 20-foot length of control cable complete with soldered on pins to replace the existing 1 frequency control cable.

Order **Kit No. PK-94**

Control Head Conversion Kits

These kits contain a 2 frequency switch, new escutcheon, wiring and, in some cases, a new on-off and volume control for placement on the existing control head unit for 2 frequency operation.

CONTROL HEAD NO.	ORDER KIT NO.	CONTROL HEAD NO.	ORDER KIT NO.
TCN 6008AE TCN 6009AE TCN 6025AE TCN 6026AE	PK-85	TCN 6027AG TCN 6030AG	PK-89
		TCN 6045AE TCN 6047AE	PK-90
TCN 6008AG TCN 6009AG	PK-86	TCN 6045AG TCN 6047AG	PK-91
TCN 6025AG TCN 6026AG	PK-87	TCN 6046AE TCN 6048AE	PK-92
TCN 6027AE TCN 6030AE	PK-88	TCN 6046AG TCN 6048AG	PK-93

"BUSINESS DISPATCHER" RADIO 2-FREQ. RECEIVER AND TRANSMITTER KITS

D31, D33BMT Series

25-30 mc	Order **TLB 6121A**
30-36 mc	Order **TLB 6122A**
36-42 mc	Order **TLB 6123A**
42-50 mc	Order **TLB 6124A**
144-174 mc	Order **TLN 6379A**

D33CMT Series

144-174 mc	Order **TLN 6707A**

2-FREQ. TRANSMITTER KITS

D31, D33BMT Series

25-50 mc	Order **TLN 6424A**
144-174 mc	Order **TLN 6378A**

D33CMT Series

144-174 mc	Order **TLN 6706A**

The above kits contain all necessary parts to convert the receiver and transmitter to 2-frequency operation. Crystals and escutcheons not included, order escutcheons below.

2-Freq. Escutcheon Kits

Std. Squelch	Order **33D82709C02**
Std. Squelch w/"Extender"	Order **33-82709C10**
Dual Squelch w/"Extender"	Order **33D83709C12**

2-Frequency Conversion Kits

25-54 mc Receivers

CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
TA 108 Series TA 111 Series	25-30 mc 30-40 mc 40-54 mc	PK-24 PK-25 PK-26	PA 9244	25-30 mc 30-40 mc 40-50 mc	PK-17 PK-18 PK-19
TA 111A, B, TA 162A, B TA 164A, B	25-30 mc 30-40 mc 40-50 mc 50-54 mc	PK-37 PK-38 PK-39 PK-40	TRB 1071 to TRB 1073 AE, AF TRB 1081 to TRB 1084AA, AB TRB 1081 to TRB 1083AE, AF	30-50 mc	PK-36
TA 111C	30-50 mc	PK-36			
TA 232	25-30 mc 30-54 mc	PK-21 PK-20			
TA 235	30-50 mc	PK-36			
PA 9034B PA 9034C PA 9157A, B	25-30 mc 30-40 mc 40-50 mc	PK-47 PK-48 PK-49			

25-54 mc Transmitters

CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
TA 104 Series	25-54 mc	PK-30	P 9030	25-30 mc	PK-27
TA 130	25-54 mc	PK-30			
TA 169	25-54 mc	PK-30	TTB 1031 to TTB 1035AA, AB, AC, AD	25-54 mc	PK-30
TA 201AT	25-54 mc	PK-31			
TA 234 Series	25-54 mc	PK-30			

450-470 mc Receivers

CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
P 9344	450-470 mc	PK-28	TA 141	450-470 mc	PK-16
TA 109	450-470 mc	PK-28	TA 146	450-470 mc	PK-16

144-174 mc Receivers

CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
TA 140 TA 161	144-152 mc 152-174 mc	PK-33 PK-32	TRD 1151AA, AB, AE, AF TRD 1152AA, AB, AE, AF TRD 1171AA, AB, AE, AF TRD 1172AA, AB, AE, AF TRD 1181AA, AB TRD 1182AA, AB	144-152 mc 152-174 mc	PK-22 PK-23
TA 140B TA 237 TA 238	144-152 mc 152-174 mc	PK-22 PK-23			
PA 9033	152-162 mc 162-174 mc	PK-34 PK-35			
PA 9033A, B, C PA 9158A, B	152-162 mc 162-174 mc	PK-43 PK-44			
PA 9243	152-162 mc 162-174 mc	PK-41 PK-42			

144-174 mc Transmitters

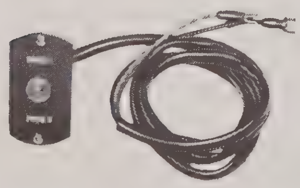
CHASSIS NO.	FREQ, RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
TA 139	144-174 mc	PK-45	TA 236	144-174 mc	PK-29
TA 139A	144-174 mc	PK-29	TTD 1000AA	152-174 mc	PK-50
TA 139AF	144-174 mc	PK-29	TTD 1000AC	152-174 mc	PK-50
TA 139AN	144-174 mc	PK-29	TTD 1060AA	152-174 mc	PK-50
TA 170	144-174 mc	PK-29	TTD 1060AC	152-174 mc	PK-50
TA 231	144-174 mc	PK-29	P 9020	152-174 mc	PK-27

450-470 mc Transmitters

CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.	CHASSIS NO.	FREQ. RANGE	ORDER KIT NO.
TU 110	450-470 mc	PK-46	TU 204T	450-470 mc	PK-46
TA 147	450-470 mc	PK-46	TU 205	450-470 mc	PK-46
TA 147T	450-470 mc	PK-46	TU 451	450-470 mc	PK-46
TU 204	450-470 mc	PK-46	P 9350	450-470 mc	PK-46

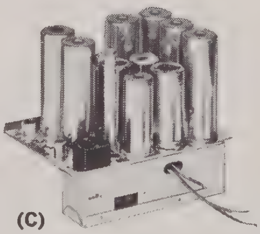
Two-Frequency Control Head Escutcheons

FOR 1-FREQ. CONTROL HEAD MODEL NO.	ORDER 2-FREQ. ESCUTCHEONS	FOR 1-FREQ. CONTROL HEAD MODEL NO.	ORDER 2-FREQ. ESCUTCHEONS	FOR 1-FREQ. CONTROL HEAD MODEL NO.	ORDER 2-FREQ. ESCUTCHEONS	FOR 1-FREQ. CONTROL HEAD MODEL NO.	ORDER 2-FREQ. ESCUTCHEONS
TU124A	64K844644	TU414	64K844644	TU559A	13K859615	TCN6000AE	13K859615
TU375	64K844644	TU554	13K859615	TU559AT	13K855136	TCN6000AG	13K859617
TU375A	64K844644	TU554A	13K859615	TU559AZ	13K859617	TCN6001AA	13K859615
TU376	64K844644	TU557AZ	13K859617	TU559Z	13K859617	TCN6001AC	13K859617
TU376A	64K844644	TU554Z	13K859617	TU561	13K859615	TCN6001AG	13K859617
TU377	64K844644	TU555	13K859615	TU561T	13K855136	TCN6004AE	13K861380
TU378	64K844644	TU555Z	13K859617	TU561Z	13K859617	TCN6007AE	13K861380
TU379	64K844644	TU559	13K859615	TCN6000AC	13K859617		

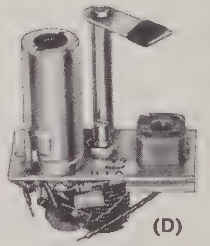


(A)

(B)



(C)



(D)

2-Frequency Switch Kits (A)

K8678 For local control base stations
PK51 For control heads and panels

Crystal Ovens 2-Frequency Receiver

Voltage	Part No.
6 volt	1V857316
12 volt	1V857317

PK-52—2-Frequency Cable (B)

For all mobile cable kits (except "Motrac" Radio) when 2 frequency leads are required.

Two-Frequency R.F. Decks (C)

FREQ.	MODEL
25-30 mc	TU 280R2L
30-40 mc	TU 280R2M
40-50 mc	TU 280R2H
144-162 mc	TU 282B-L-R2
162-174 mc	TU 282B-H-R2

Two-Frequency Oscillator Decks (D)

TRANSMITTER MODEL NO.	ORDER KIT NO.
PA 8461, PA 8491, PA 8671, PA 8691, PA 9110, TA 190	P8465
TA 241	TU-606-C2
TA 200, TA 200A	TLN 6391A(F2) TLN 6390A(F1)

Crystals, Channel Elements, *E.M.R. (Reeds)

Laboratory-precision components engineered for utmost efficiency

- Optimum Stability
- Longest Life
- Exact Workmanship
- Customized Service

All Motorola crystals, channel elements and EMR's must meet the same high laboratory standards, whether used in new equipment or as replacements. Our production techniques are geared to highest quality demands of our customers . . . to the best service available in both routine and emergency situations.

Motorola is making constant strides to improve its service to its customers on replacement crystals, EMR's (reeds), and channel elements. Your comments and suggestions for further improvement of our service are welcomed.

Address correspondence to:

Marketing Manager—Component Products
Motorola Inc.
4545 W. Augusta Blvd.
Chicago, Illinois 60651, U.S.A.

*E.M.R.: Electro-Magnetic Resonators

Ordering and Shipping Information

UNITED STATES ONLY
(INCLUDING HAWAII AND ALASKA)

ORDERING ADDRESS

All Motorola crystals, EMR's (reeds), and channel elements are shipped direct from our manufacturing plant in Chicago. Therefore, orders for these items should be sent to one of the following addresses only. Orders placed with other Motorola offices or facilities will encounter forwarding delays. Order crystals, EMR's, and channel elements separate from other parts items.

ORDERING METHODS

To permit maximum service, Motorola has provided complete flexibility for the placement of orders for frequency devices. Orders may be placed via regular mail, air mail, teletype, telegraph, or telephone.

Regular mail should be addressed to:

Motorola Inc.
Component Products—Crystal Service
4545 W. Augusta Blvd.
Chicago, Illinois 60651

Airmail, received three times daily, should be addressed to:

Motorola Inc.
Component Products—Crystal Service
P.O. Box 66191, O'Hare Int'l Airport
Chicago, Illinois 60666

Telegrams are received direct at our plant when addressed:

Motorola Inc.
Component Products—Crystal Service
Call Letters SFH
4545 W. Augusta Blvd.
Chicago, Illinois 60651

Teletype—(TWX) messages are received direct to our office when addressed:

Motorola Inc.
Component Products—Crystal Service
Chicago, Illinois
TWX 910-221-5565

Telephones We have direct lines answered only by our Crystal Service Department weekdays and evenings.

From 8:00 AM to 1:00 AM—Monday through Friday—
From 8:00 AM to 4:30 PM—Saturday—
direct line Area Code (312) 772-6540
All hours, day and night, including weekend "emergency" call the above number. Our answering service will respond. Leave your name and phone number and a member of the crystal service department will contact you promptly.

"OFF THE AIR EMERGENCIES"—For "off the air" emergency type orders, *involving not more than a single crystal, reed, or channel element*, telephone call should be immediately placed as indicated above. Calls between 1:00 AM and 8:00 AM week days, 4:30 PM and 8:00 AM Saturdays and all hours Sundays will be answered by our answering service. Give your name and telephone number to the answering service, and you will be called back promptly by a member of the Crystal Service department.

SHIPMENT OF ORDERS—SHIPPING CHARGES

Motorola pays all shipping charges on routine orders of $25.00 or more shipped via Parcel Post or UPS. Shipments by premium methods such as Rail Express, Air Express, UPS Air, or other method will be made, *at customers expense*, when so directed.

Motorola provides no cost courier service, three times daily—Monday through Friday, to Chicago's O'Hare Int'l Airport for outgoing Airmail, Air Parcel Post, and Air Express shipments. A special, premium charge courier service is available to the airport at other times—consult crystal service for charges.

SHIPPING SCHEDULES—Motorola maintains substantial stocks of finished and semi-finished items. Nevertheless, certain minimum periods are required for the assembly, test, and packaging of precision frequency devices. The normal "in plant" periods required for fulfilling orders, as given below, are exclusive of shipping times.

ITEM	EMERGENCY	EXPEDITE	NORMAL	"SP" COMPONENTS
E.M.R.'s (Reeds)	12 Hrs.	2 Days	3 Days	1 Week
5 PPM Channel Elements	1 Day	3 Days	1 Week	2 Weeks
2 PPM Channel Elements	2 Days	4 Days	1 Week	2 Weeks
RF Crystal	12 Hrs.	2 Days	1 Week	2 Weeks
RF Crystal Filter	2 Weeks	2 Weeks	3 Weeks	4 Weeks
IF Crystal	8 Hrs.	1 Day	3 Days	1 Week

CANADA ONLY

ORDERING ADDRESS

All Motorola crystals, EMR's (reeds), and channel elements are shipped direct from our manufacturing plant in Willowdale, therefore, orders for these items should be sent to one of the following addresses only. Orders placed with other Motorola offices or facilities will encounter forwarding delays.

ORDERING METHODS

To permit maximum service, Motorola has provided complete flexibility for the placement of orders for frequency devices. Orders may be placed via regular mail, air mail, teletype, telegraph, or telephone.

Regular mail, Airmail and Telegrams should be addressed to:

Canadian Motorola Electronics Company
Parts Department
3125 Steeles Avenue East
Willowdale, Ontario

Teletype—messages are received direct at our plant when addressed:

Canadian Motorola Electronics Company
Parts Department
Willowdale, Ontario
TWX-610-492-2713
TELEX 02-29944LD

Telephone

From 8:30 AM to 4:30 PM—Monday through Friday
Area Code (416) 499-1441
Ask for "Parts Department"

SHIPMENT OF ORDERS—SHIPPING CHARGES

All orders are shipped F.O.B. Willowdale, Ontario.

SHIPPING SCHEDULES—Consult Factory

ALL COUNTRIES EXCEPT U.S.A. AND CANADA

ORDERING ADDRESS

All Motorola crystals, EMR's (reeds), and channel elements are shipped direct from our manufacturing plant in Chicago, therefore, orders for these items should be sent to one of the following addresses only. Orders placed with other Motorola offices or facilities will encounter forwarding delays. Order crystals, EMR's, and channel elements separate from other parts items.

ORDERING METHODS

To permit maximum service, Motorola has provided complete flexibility for the placement of orders for frequency devices. Orders may be placed via air mail, teletype, telegraph, or telephone.

Airmail, received three times daily, should be addressed to:

Motorola Inc.
Component Products—Crystal Service
P.O. Box 66191, O'Hare Int'l Airport
Chicago, Illinois 60666, U.S.A.

Telegrams are received direct at our plant when addressed:

Motorola Inc.
Component Products—Crystal Service
Call Letters SFH
4545 W. Augusta Blvd.
Chicago, Illinois 60651, U.S.A.

Teletype—(TWX) messages are received direct at our plant when addressed:

Motorola, Inc.
Component Products—Crystal Service
Chicago, Illinois 60651, U.S.A.
TWX 910-221-5565

SHIPMENT OF ORDERS—SHIPPING CHARGES

All orders are shipped F.O.B. Chicago, Illinois, U.S.A.

SHIPPING SCHEDULES—Documentation of export orders normally adds one day to the "in plant" periods required for fulfilling orders shown above for United States orders.

ALL ORDERS

ORDERING INFORMATION

Each order should clearly identify the item desired by giving:

Model Number—Complete model or type designation, including all prefixes and suffixes for each crystal, EMR (reed), or channel element desired.

Carrier Frequency—For crystals and channel elements give the carrier frequency desired, in Megahertz to three decimal places. For example—155.535 MHz.

Crystal, Channel Element or Reed frequency. Give frequency in Kilohertz, to three decimal places (Example 12637.917 KHz) or, for reeds give reed frequency to one decimal place plus reed code. (Example 107.2 Hz—1B)

Radio Model Number—Always specify the complete model number of the radio in which the part is to be used. For example—C73MBH3100A-B (always give suffix letter).

SP Release Number—If unit is an "SP" always give SP Number if known.

OBSOLETE AND UNLISTED ITEMS

Certain types of crystals, EMR's (reeds), and channel elements are obsolete and are not listed in these pages. For information on these or other unlisted items contact the Crystal Service department.

CONFIRMING ORDERS—Orders mailed to confirm telephone, telegraph and teletype orders must be clearly marked "CONFIRMING." Motorola is not responsible for duplicate shipments made on such orders not marked "CONFIRMING."

Telephone, Telegraph and Teletype orders are entered as received and understood. If the confirming order differs from the original order the original order takes precedence.

RETURNS—Any discrepancy on orders must be brought to our attention within thirty (30) days of shipment. Our written authorization must be obtained before returning any items.

PURCHASE ORDER DISCREPANCIES—Orders for crystals and channel elements on which the fundamental and operating frequencies are specified and do not agree will be returned to you.

GENERAL INFORMATION

Only crystal numbers preceded by "R," "K," "W" and "Z" are heated oven type. "R" type crystals are single crystal ovens. "K," "W" and "Z" types are two crystal ovens and can be ordered with one crystal insert or two as required.

Crystal inserts for "K," "W" and "Z" types are available for field replacement. "R" type crystal inserts are not available for field replacement because of the sealed construction. Defective "R" types should be returned to Motorola Crystal Service Dept. for repair or replacement.

TEST SET CRYSTALS—Type AQL requires 30 to 45 days to supply.

MONITOR CRYSTALS—Type SFMT —2 below 1950.000KC require thirty (30) to forty-five (45) days to supply.

"SP" (Special) crystals require 5 to 10 days to supply.

"SP" Reeds 5 to 10 days to supply.

REEDS for UHF and LF pagers should be ordered as required. Ordering for stock normally requires a *minimum* of 7 days for shipment.

MOTOROLA WARRANTY and CREDIT RETURN POLICIES

- All Motorola Crystals, Channel Elements and Crystal Filters are guaranteed for *life on frequency and activity or output. E.M.R. (reeds) are guaranteed for a period of 3 years.

  *This warranty policy covers items manufactured from 1966 on. Items manufactured before 1966 are not covered under this warranty policy.

- Seals (when a sealed type) must be unbroken when returned for replacement or credit.
- Motorola Crystals, Channel Elements, Crystal Filters, and E.M.R. (reeds) are guaranteed to work only in the Motorola Equipment for which they were designed. Use in any other equipment or circuits voids Motorola's Warranty. Items received damaged due to misuse or abuse are not acceptable. Crystal Filters returned which are damaged due to application of excessive power are not acceptable and will be returned to you with no action taken.
- Defective Crystals, Channel Elements, Crystal Filters, and E.M.R. (reeds) returned under warranty will be replaced with the *same type* and *frequency only*, and coded with the date of the original component.
- Motorola Crystals, Channel Elements, and Crystal Filters are manufactured per order and are not stock items. Therefore, our written authorization must be obtained before returning any items for credit or replacement due to customer errors or duplicate shipments made because a confirming order was not plainly marked as confirming.
- Shipments must include crystal disposition and data form with each item being returned listed by quantity, type, frequency/code, manufacturers date code, and defect code. Please indicate if items are being returned for replacement or credit. Our factory order number or invoice number must be referenced when returning items for credit.
- ALL RETURNED MERCHANDISE MUST HAVE THE RETURN SHIPPING CHARGES PREPAID BY THE CUSTOMER.

SPECIAL ALLOWANCE EXCHANGES

Motorola offers a special exchange allowance, against the purchase of new crystals, EMR's (reeds), and channel elements under the following conditions:

(a) The frequency change is required by:
    FCC directive or action, or
    Interference situation

(b) and, the exchange order is submitted by the original purchaser of the Motorola equipment with the allowance to be made against published *net "User" prices only*.

(c) and, the exchange allowance order is submitted via, and approved by, a Motorola Area Office.

Crystal Filters and EMR'S

CRYSTAL FILTERS

STATE-OF-THE-ART DESIGN—This unique state-of-the-art crystal filter provides outstanding attenuation of unwanted signals—even at adjacent and alternate channels. Many years of field use have produced enthusiastic acclaim from users who had severe interference problems.

ADJACENT CHANNEL PROTECTION—Heavy channel crowding in most parts of the country is a serious hindrance to effective communications. Interference from adjacent channel users has become particularly troublesome. Now, the amazingly narrow bandpass of the Precision Crystal Filter can provide as much as 20 db reduction in desensitizing interference depending on the operating frequency and channel separation; even more in many cases. The effect of this filter on IM products and receiver spurious response is equally startling. A minimum of —15 db is obtainable with adjacent and alternate channel interference; —20 db or more on all others.

QUALITY CONSTRUCTION—These filters get the "full treatment" to assure years of dependable operation. Each Motorola Precision Crystal Filter is custom-designed for the intended system. Precise control is exercised over the manufacture of each unit—from laboratory construction to final packaging. Components are permanently sealed in a sturdy housing to insure continuous high performance.

SIMPLE INSTALLATION—Two mounting screws are all you need to secure the Precision Crystal Filter to the base station cabinet. Just plug the unit "in-line" between the receiver and antenna relay and the job is done. Convenient, standard connectors are an integral part of the filter housing. An interconnecting cable with appropriate connectors is part of the installation kit.

Contact Crystal Service for quantity prices.

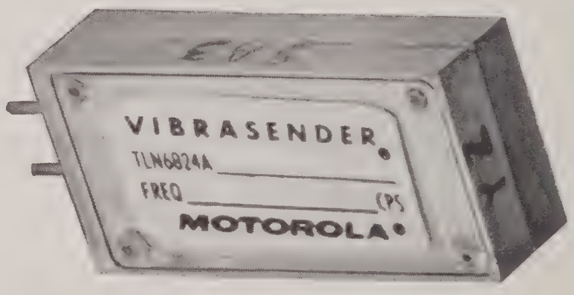
NUMBER	DESCRIPTION
TLN1076A	136-174 MHz, for all transistorized stations. Includes Filter and Installation Kit.
TLN1077A	25-50 MHz, for all transistorized Stations. Includes Filter and Installation Kit.

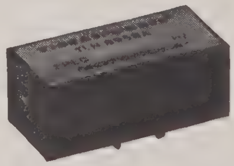
67-88 MHz Filters available on special order. Consult Factory for Filters for older base stations.

MONOLITHIC FILTER AND DISCRIMINATOR CRYSTALS
(order by part number)

DSA	48D84104B01	FSMA	48D82167J01
DSB	48D84669B01	FSMB	48D05150A02
FKA	48D84412B01	FSMC	48D05150A01
FSE	48D84259B01	FYA	48D82086J01
FSE	48D84259B02	FYB	48D84863B01
FSE	48D84259B03	FYC	48D84895A01

MOTOROLA "VIBRASENDER" AND "VIBRASPONDER" EMR'S (REEDS)





Motorola "Vibrasender" and "Vibrasponder" resonant frequency devices are highly stable tone generating and detecting elements used in selective calling. These electromechanical devices operate on the familiar "tuning fork" principle.

When ordering replacement resonant EMR's (reeds) from original equipment list the following information.

1. Model No. of EMR (reed)—Example: TU-217
2. Code No. of EMR (reed)—Example: 1Z
3. Tone frequency of EMR (reed)—

The EMR's (reeds) listed are for replacement only.

No attempt should be made to change the tone frequency of "Private-Line" radio systems without advising the Motorola Systems Department as tones are assigned to specific areas to minimize interference. Special frequencies 20% additional charge.

MODEL NO.
NFN 6008A
NLN 6024A
NLN 6059A
NLN 6085A
TLN 6364A
TLN 6411A
TLN 8957A
TLN 8958A
TLN 6492B
TLN 8904A

MODEL NO.
TLN 8966A
TLN 6709B
TLN 6824A
TLN 8381A
TU 217
TU 321B
TU 333
P 7810
TU 202

Channel Elements

The most modern Motorola equipment uses the Channel Element. In the channel element frequency stability is electronically controlled—crystal, oscillator, and temperature compensating circuits are enclosed in a single plug-in unit. The components are individually selected and carefully matched in such a way that temperature variations are immediately compensated for so that, as the ambient temperature varies, the oscillator circuit values are instantaneously adjusted to keep the output frequency constant. There are no ovens, no heaters, no thermostats—the entire channel element is 100% solid state for maximum reliability. The frequency control is so accurate that the channel element will maintain the frequency stability of a transmitter or receiver to within .0005% of the assigned frequency over the entire operating temperature range of equipment designed to use the channel elements. And, since no warm-up time is needed, the oscillator is "on-frequency" the instant power is applied. For an even greater degree of frequency control, channel elements are available that maintain the frequency within .0002% of the assigned frequency. The .0002% channel elements are completely interchangeable with the .0005% units.

CHANNEL ELEMENT REFERENCE CHART FOR REPLACEMENT ORDERS

YOU WISH TO REPLACE ONE OF THE FOLLOWING CHANNEL ELEMENTS	WITH A ±.0005% CHANNEL ELEMENT, ORDER:	WITH A ±.0002% CHANNEL ELEMENT, ORDER:
TLN1020	TLN1081	TLN1086
TLN1021	2 — TLN1081	2 — TLN1086
TLN1022	TLN1082	TLN1087
TLN1023	2 — TLN1082	2 — TLN1087
TLN1024	TLN1083	TLN1087
TLN1025	2 — TLN1083	2 — TLN1087
TLN1049	TLN1085	TLN1088
TLN1062	NOT AVAILABLE	TLN1086
TLN1067	TLN1081	TLN1086
TLN1068	2 — TLN1081	2 — TLN1086
TLN1069	TLN1082	TLN1087
TLN1070	2 — TLN1082	2 — TLN1087
TLN1071	TLN1083	TLN1087
TLN1072	2 — TLN1083	2 — TLN1087

NOTE: When replacing a .0005% transmitter channel element with a .0002% channel element (TLN1087 only) the FCC type acceptance number of the transmitter must be suffixed with the letter "C". Explicit instructions for doing this are included with your replacement channel element.

When replacing any of the models listed from TLN1020 thru TLN1073, an adapter kit, TLN8274, must also be ordered. This kit will be supplied free of charge.

YOU WISH TO REPLACE ONE OF THE FOLLOWING CHANNEL ELEMENTS	WITH A ±.0005% CHANNEL ELEMENT, ORDER:	WITH A ±.0002% CHANNEL ELEMENT, ORDER:
TLN1073	TLN1085	TLN1088
TLN1081	TLN1081	TLN1086
TLN1082	TLN1082	TLN1087
TLN1083	TLN1083	TLN1087
TLN1085	TLN1085	TLN1088
TLN1086	TLN1081	TLN1086
TLN1087	TLN1082 or TLN1083	TLN1087
TLN1088	TLN1085	TLN1088
TLN1099	TLN1105	TLN1099
TLN1105	TLN1105	TLN1099
TLN1124	NOT AVAILABLE	TLN1124

When replacing any of the models listed from TLN1069 thru TLN1072 with a .0005% channel element, the "B" suffix on the FCC type acceptance number must be removed.

CHANNEL ELEMENTS AND RESONATORS

"Micor" ±.0005% Stability Channel Elements

NUMBER	NUMBER
K 1003	K 1006
K 1004	K 1007
K 1005	

"Micor" ±.0002% Stability Channel Elements

NUMBER
K 1036
K 1037
K 1038

"Motrac" and "Motran" ±.0005% Stability Channel Elements

DESCRIPTION		FOR TRANSMITTER ORDER KIT NO.	FOR RECEIVER ORDER KIT NO.
25-50MHz	1 Freq.	TLN1022, 1082	TLN1020, 1081A, 1085A
	2 Freq.	TLN1023	TLN1021
136-174MHz	1 Freq.	TLN1024, 1062, 1083	TLN1020, 1081, 1085
	2 Freq.	TLN1025	TLN1021
406-470MHz	1 Freq.	TLN1024, 1083	TLN1081, 1105
	2 Freq.	TLN1025	
±.0002% Stability Channel Elements			
25-50MHz	1 Freq.	TLN1087	TLN1086
136-174MHz	1 Freq.	TLN1087	TLN1086
406-470MHz	1 Freq.	TLN1087, 1124, 1190	TLN1086, 1099A, 1202

Two Piece Channel Elements

NUMBER	DESCRIPTION
CER 1-500A	Receiver, complete element, **non-AFC,** 405-470 MHz
TLN 8967A	Oscillator base, 405-470 MHz, non-AFC
RES 1-500A	Crystal resonator, 405-470 MHz
CER 1-500B	Receiver, complete element, 405-470 MHz, **AFC type**
TLN 8968A	Oscillator base, 405-470 MHz, AFC type
RES 1-500B	Crystal resonator, 405-470 MHz

One Piece Replacement Channel Element	Obsolete Two Piece Unit	
	Channel Element	Resonator
TLN1081B	CER59	RES-59
	CER60	RES-60
	CER61	RES-61
	CER62	RES-62
	CER73	RES-73
	CER86	RES-86
TLN1082B	CET63	RES-63
	CET64	RES-64
TLN1083B	CET4	RES-4
	CET65	RES-65
TLN1105B	CER87	RES-87
	CER136	RES-136
TLN1146B	CER4	RES-4
	CER112	RES-112
	CER113	RES-113
TLN1196B	CER76	RES-76
	CER78	RES-78
TLN1197B	CER75	RES-75
	CER77	RES-77

A one-time credit for the difference in selling price between the requested resonator and the supplied channel element will be given upon receipt of the lower portion of the obsolete two-piece channel element. Return the lower portion of the channel element to:

MOTOROLA, INC.
c/o Crystal Service Department
4545 W. Augusta Blvd.
Chicago, Illinois 60651

"Mocom•70" Resonators

NUMBER
K 1017
K 1018
K 1019
K 1056
K 1057
K 1058
K 1059

"Mocom•35" Resonators

NUMBER
K 1040
K 1048
K 1049
K 1061 (Canada only)

Equipment Model Cross Reference

CHANNEL ELEMENTS, CRYSTALS, "PRIVATE-LINE" EMR'S (REEDS)

The following listing gives standard tolerance (e.g. ±.0005% for high band MOTRAC) elements.

MOTRAC and MOTRAN MOBILES

MODEL	FOR TRANSMITTER ORDER		FOR RECEIVER ORDER		"PRIVATE-LINE"	
					SENDER	SPONDER
LOW-BAND						
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.	TU217	TU333A
U41HHT—A, B, D U41HHT—C w/o extender U51HHT—A, B, D U51HHT—C w/o extender U71HHT—A, B U71HHT—C w/o extender	ZNN-3A	ZNN-3-3A	(25-42 MHz) ZMM-14A (42-54 MHz) ZMM-15A	 ZMM-14-14A ZMM-15-15A		
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.		
U41HHT—C w/extender U41HHT—E U51HHT—C w/extender U51HHT—E U71HHT—C w/extender	ZNN-3A	ZNN-3-3A	(25-42 MHz) ZMM-57A (42-54 MHz) ZMM-58A	 ZMM-57-57A ZMM-58-58A		
LHT—all models **except** simultaneous receive	One TLN1082B for each frequency		One TLN1081B for each frequency		TLN6824A	
LHT—all models with simultaneous receive	One TLN1082B for each frequency		2 FREQUENCY (LOWER FREQUENCY) TLN1146 (std. IF) TLN1196 (shifted IF) (HIGHER FREQUENCY) TLN1147 (std. IF) TLN1197 (shifted IF)			
LLT	One TLN1082 for each frequency		One TLN1081 for each frequency			
HIGH-BAND						
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.	TU217	TU333
T43HHT—A, B U43HHT—A, B U43HHT—C (12 volt) U53HHT—A, B U63HHT—A, B	ZNN-3A	ZNN-3-3A	(136-150.8 MHz) ZMM-39A (150.8-174 MHz) ZMM-10A	 ZMM-39-39A ZMM-10-10A		
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.		
T43HHT—C U43HHT—C (6/24 volt) U43HHT—D U53HHT—C U63HHT—C	ZNN-3A	ZNN-3-3A	(136-150.8 MHz) ZMM-41A (150.8-174 MHz) ZMM-42A	 ZMM-41-41A ZMM-42-42A		
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.		
U43HHT—E	ZNN-3A	ZNN-3-3A	(136-150.8 MHz) ZMM-55A (150.8-174 MHz) ZMM-56A	 ZMM-55-55A ZMM-56-56A		
LHT	One TLN 1083 for each freq.		One TLN1081 for each freq.		TLN6824A	
MHT—all models **except** simultaneous receive **MSN**	One TLN1083B for each freq.		(136-150.8 MHz) One TLN1081B for each freq. (150.8-174 MHz) One TLN1081B for each freq.			TLN8381A
MHT—models with simultaneous receive	One TLN1083 for each freq.		2 FREQUENCY (LOWER FREQUENCY) TLN1146A (std. IF) TLN1196A (shifted IF) (HIGHER FREQUENCY) TLN1147A (std. IF) TLN1197A (shifted IF)			
450-BAND						
	1 FREQ.	2 FREQ.	1 FREQ.	2 FREQ.	TU217	TU333
HHT	(406-470 MHz) WNN-4A	 WNN-4-4-A	(406-470 MHz) ZMM-47A (450-470 MHz) ZMM-48A	 ZMM-47-47A ZMM-48-48A		
LHT	One TLD1083 for each freq.		One TLN1081 for each freq.		TLN6824A	TLN8381A
MHT	One TLN1083B for each freq.		One CER106B for each freq.			
T34MST T44MST	One TLN1146B for each freq.		One CER106B for each freq.			
T54MST T64MST T74MST	One TLN1146B for each freq.		One CER106A for each freq.			

MOCOM and BUSINESS DISPATCHER MOBILES

MODEL	FOR TRANSMITTER ORDER		FOR RECEIVER ORDER		"PRIVATE-LINE"	
					SENDER	SPONDER
LOW-BAND						
D31BMT1000—A, B D31BHT1100—A, B D31BHT1400—A D31BHT3100—A, B, C D31BMT3400—A, B	1 FREQ. ZNN-3A	2 FREQ. ZNN-3-3A	AM-12		TLN6364A	TU333AL
D31BMT1000—C D31BMT1100—C D31BMT1400—B D31BHT3100—D D31BMT3400—C	1 FREQ. WNN-3A	2 FREQ. WNN-3-3A	AM-12		TLN6824AA	TU333AL
"MOCOM•10" (AAN/AAB)	(25-30 MHz) ANT97 (30-50 MHz) ANT98		(25.0-25.7 MHz) ANT 99 (25.7-26.2 MHz) ANT103 (26.2-28.8 MHz) ANT 99 (28.8-29.4 MHz) ANT104 (29.4-30.0 MHz) ANT 99 (30.0-32.9 MHz) ANT100 (32.9-33.5 MHz) ANT104 (33.5-36.1 MHz) ANT100 (36.0-36.4 MHz) ANT101 (36.4-37.2 MHz) ANT108 (37.2-41.0 MHz) ANT101 (41.0-41.8 MHz) ANT105 (41.8-45.5 MHz) ANT101 (45.5-46.5 MHz) ANT105 (46.5-50.0 MHz) ANT101		One TLN6709B for send and receive "Private-Line"	
"MOCOM•70" (BBN)	(25-30 MHz) ANT97 (30-50 MHz) ANT98		(25.0-42.0 MHz) ANT 59 (42.0-50.0 MHz) ANT 60		TLN6824A	TLN8381A
HIGH-BAND						
D33BMT	1 FREQ. WNN-3A	2 FREQ. WNN-3-3A	One AM-13 for each frequency		TLN6364A	TU333AL
D33CMT D43CMT T33CMT T43CMT U43CMT	1 FREQ. WNN-3A	2 FREQ. WNN-3-3A	1 FREQ. (136-150.8 MHz) ZMM-66A (150.8-174 MHz) ZMM-50A	2 FREQ. ZMM-66-66A ZMM-50-50A	TLN6824AA	TU333AL
	3 freq. radio uses 1-1 freq. and 1-2 freq. crystals. 4 freq. radio uses 2-2 freq. crystals.					
"MOCOM•35" (CCN)	K1049A		K1040A		One TLN8381A for send and receive "Private-Line"	
"MOCOM•70" (BBN)	K1017A		K1018A		TLN6824A	TLN8381A
450-BAND						
DRT	TLN-1083		TLN1105A		TLN6824AA	TLN8381A
"MOCOM•30" T34DRT	TLN1083A ±.0005%		TLN1105A ±.0005%		T-TLN6824A	
D34DRT	TLN1087A ±.0002%		TLN1099A ±.0002%		R-TLN8381A	
"MOCOM•70" (BBN)	K1017A		K1018A			

MICOR MOBILES

LOW-BAND

T___1RTN	K1004A	K1003A	TLN6824A	TLN8381A

HIGH-BAND

T___3RTN	K1007A	K1005A	TLN6824A	TLN8381A

Equipment Model Cross Reference *(continued)*

PORTABLES

MODEL	ORDER "PRIVATE-LINE" REED	ORDER TRANSMITTER CRYSTAL	ORDER RECEIVER CRYSTAL
LOW-BAND			
H21DCN	TLN6492	ABS-2	(25-42 MHz) YM45 (42-54 MHz) YM46
P21DDN		AB-2	
P31DDN		ABX-2	
D41DDN Z41DDN	TLN8966		
HIGH-BAND			
H23DCN P23DDC	TLN6492	YN-19	YM35
H23DEN P23DEN P33DEN P43DEN Z13ULN	TLN6492	NLD6230A	
D23DEN	TLN8966A		Specify IF frequency (16.8 MHz IF) YMRX-109 (18.0 MHz IF) YMRX-110
H13FFN	TLN8904A	YVSR-83	
H23FFN	TLN6709B (except as noted below)		
H23FFN-1106 H23FFN-1108 H23FFN-1116 H23FFN-1118 H23FFN-1136 H23FFN-1138 H23FFN-1145 H23FFN-1147 H23FFN-1175 H23FFN-1177	TLN-8904A		
H33FFN	TLN6709B (except as noted below)	YBSR-83	
H33FFN-1105 H33FFN-1107 H33FFN-1115 H33FFN-1117 H33FFN-1135 H33FFN-1137	TLN-8904A		
450-BAND			
H24DCN H24DEN Z14ULN	TLN6709B	NLE6040A	(406-420 MHz) NLE6031A (450-470 MHz) NLE6032A
H___4FFN	TLN6709B	NLE6110A	YVMR-117

BASE STATIONS and REPEATERS

MODEL	ORDER TRANSMITTER CHANNEL ELEMENT	ORDER RECEIVER CHANNEL ELEMENT	"PRIVATE-LINE"	
			SENDER	SPONDER
LOW-BAND				
LPB/LPY LHB	One TLN1082B for each frequency	**#1 RECEIVER** One TLN1081 for each #1 Receiver frequency **#2 RECEIVER** One TLN1085 for each #2 Receiver frequency	TLN6824A	TLN8381A
Consollette L51BBB	(25-30 MHz) ANT 97 (30-30 MHz) ANT 98	(25-42 MHz) ANT 59 (42-50 MHz) ANT 60		
"MOCOM•10" L21AAB	25-30 MHz ANT97 30-50 MHz ANT98	25.0-25.7 MHz ANT99 25.7-26.2 MHz ANT103 26.2-28.8 MHz ANT99 28.8-29.4 MHz ANT 104 29.4-30.0 MHz ANT99 30.0-32.9 MHz ANT100 32.9-33.5 MHz ANT104 33.5-36.0 MHz ANT100 36.0-36.4 MHz ANT101 36.4-37.2 MHz ANT103 37.2-41.0 MHz ANT101 41.0-41.8 MHz ANT105 41.8-45.5 MHz ANT101 45.5-46.5 MHz ANT105 46.5-50.0 MHz ANT101	TLN6709BG	

HIGH-BAND

LPB/LPY LHB MPB-A MPY-A MHB-A Except tone models 6A & 7A	One TLN1083B for each frequency	One TLN1081 for each frequency* *#2 Receiver if frequency difference is 4 or 8 MHz ±60 KHz, use: TLN1085	TLN6824A	TU333A
MPB-6A, 7A, B MPY-6A, 7A, B MHB-6A, 7A, B MHX MHY	One TLN1083B for each frequency	(136-150.8 MHz) One TLN1081B for each frequency* (150.8-174 MHz) One TLN1081B for each frequency* *#2 Receiver if frequency difference is 4 or 8 MHz ±60 KHz, use: (136-150.8 MHz) TLN1197B 150.8-174 MHz) TLN1196B	TLN6824A	TLN8381A
L-3BBB	K1017A	K1018A		
CONSOLETTE L53BBB L43BBB	K1017 ±.0005%	K1018 ±.0005%	T-TLN6824 R-TLN8381	

450-BAND

T1460 through T1467 MSB/MSY	(450-470 MHz) One TLN1190 for each frequency	One CER106B for each frequency* *#2 Receiver if frequency difference is 5.85 or 11.7 MHz ±50 KHz, use: CER107B	TLN6824A	TLN8381A
LHB	One TLN1087 for each frequency	One TLN1086 for each frequency		
MHB	One TLN1087 for each frequency	One CER106B for each frequency		
XBB/XBY	One TLN1124 for each frequency	One TLN1086 for each frequency		

406-420 MHz, 450-470 MHz MOBILE PRODUCTS

MARK 12	T1409 T1410 T1411 T1412	1—TLE1200 Channel Element per Channel 1—TLN4318A Channel Bypass Element per unused Channel	T-TLN6824A R-TLN8381A

RECEIVERS

PRODUCT	MODEL SERIES	FREQUENCY RANGE	CRYSTAL OR CHANNEL ELEMENT (N1)	EMR (N2)
ALERT MONITOR	M01CNB M03CNB M04CNB	30-54 MHz 150.8-174 MHz 406-420 MHz 450-470 MHz	AN95 30-42 MHz AN96 42-54 MHz AN94 YVSW143 YVSW142	R-TLN8381A P-TLN6709BG
SATELLITE RECEIVER	N01LNB	25-50 MHz Std. Squelch 30-50 MHz Dual Squelch	TLN1081A ±.0005% TLN1086A ±.0002%	R-TLN8381A
SATELLITE RECEIVER	N03MNB	136-174 MHz	TLN1081A ±.0005% TLN1086A ±.0002%	

PAGERS

60-149.625 kHz

MODELS	CHANNEL CRYSTAL	EMR
H00DNC 1041D—Through H00DNC 1046D—	None	1-TLN8957A
H00DNC 1052E—, H00DNC 1054E—, H00DNC 1056E—	None	2-TLN8957A

30-45 MHz

H01BNC 1104AQ Through H01BNC 1107AQ	YSW	2-TLN6709B
H01BNC 1012BN, H01BNC 1016BN	33-37 MHz YSW31 41-45 MHz YSW13	2-TLN6709B
H01BNC 1060AN	YMW89	3-TLN6709B

148-174 MHz

A03DNC Series	KXN6004A	NFN6008A
H03BNC-1100DQ, H03BNC-1101DQ, H03BNC-1102DQ, H03BNC-1103DQ, H03BNC-1104BQ, H03BNC-1105BQ, H03BNC-1106BQ, H03BNC-1107BQ, H03BNC-1108AQ H03BNC-1109AQ, H03BNC-1110AQ, H03BNC-1111AQ	YSW82	2-TLN6709B
H03107BN, H03BNC-1080BN, H03BNC-1082BN	YSW82	2-TLN6709B
H03BNC-1074AN	YSW82	3-TLN6709B

450-470 MHz

H04BNC-1100AQ Through H04BNC-1111AQ	YVSW102	2-TLN6709B

406-420 MHz, 450-470 MHz BASE STATION AND REPEATER PRODUCTS

PRODUCT	MODEL SERIES	(N1) CHANNEL ELEMENT OR CHANNEL CRYSTAL		EMR (N2)
		TRANSMITTER	RECEIVER	
UPRIGHT COMPA-STATION CONSOLETTE	T1460 Through T1467 C___4MSB, C___4MSY, L___4MSB	TLN1190A	1—CER106B for each frequency except for two receiver models with frequency difference of 5.85 or 11.7 MHz, ±50 kHz, then use CER107B	T-TLN6824A R-TLN8381A

72-76 MHz REPEATERS

UPRIGHT	B42AAB B42AAY J42AAY	R12	RM74	

136-174 MHz REPEATERS

LOOKOUT	N1106C N1116C	NLD6230A	YMW35	

450-470 MHz REPEATERS

LOOKOUT	N1138C	XXN69F	NLE6032A	

NOTE—1 Where choice exists, % frequency tolerance is shown. See equipment specification for details.

NOTE—2 REED usage: TR Single reed for "PL" Transmit and Receive, same code.
T "PL" Transmit reed.
R "PL" Receive reed.

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MOTOROLA INC.
communications div. parts dept.
1313 E. Algonquin Rd., Schaumburg, Ill. 60172

EXECUTIVE OFFICES: 1301 E. Algonquin Road, Schaumburg, Illinois 60172, (312) 359-6550

U.S. ORDERS

WESTERN AREA PARTS
1170 Chess Drive
Foster City, San Mateo,
California 94404
Phone: 415-349-3111
TWX: 910-375-3877

SOUTHWESTERN AREA PARTS
3320 Belt Line Road
Dallas, Texas 75234
Phone: 214-241-2151
TWX: 910-860-5505

EAST CENTRAL AREA PARTS
12955 Snow Road
Parma, Ohio 44130
Phone: 216-267-2210
TWX: 810-421-8845

PACIFIC SOUTHWESTERN
AREA PARTS
2333 Utah Avenue
El Segundo, California 90245
Phone: 213-644-1101
TWX: 910-348-6278

SOUTHEASTERN AREA PARTS
P.O. Drawer I
Forest Park, Georgia 30050
Phone: 404-762-6183
TWX: 810-751-8300

MIDWEST AREA PARTS
1313 E. Algonquin Road
Schaumburg, Illinois 60172
Phone: 312-359-6550
TWX: 910-693-1592

EASTERN AREA PARTS
85 Harristown Road
Glen Rock, New Jersey 07452
Phone: 201-447-4000
TWX: 710-988-5602

CANADIAN ORDERS

Canadian Motorola Electronics Company
Parts Department
3125 Steeles Avenue East
Willowdale, Ontario
Phone: 416-499-1441
TWX: 610-492-2713
Telex: 02-29944LD

ALL COUNTRIES EXCEPT U.S. AND CANADA

MOTOROLA INC.
International Parts
1313 E. Algonquin Road
Schaumburg, Illinois 60172 U.S.A.
Phone: 312-359-6550
TWX: 910-693-1592 or 1599
Telex: 722443 or 722424
Cable: MOTOL

MOTOROLA Americas Inc.
1313 E. Algonquin Road
Schaumburg, Illinois 60172 U.S.A.
Attn.: International Parts
Phone: 312-359-6550
TWX: 910-693-1592 or 1599
Telex: 722443 or 722424
Cable: MOTOL

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